

CHAPTER 1

EXECUTIVE SUMMARY

FORECAST HIGHLIGHTS

Despite the economic hardships--many of which were triggered by 9/11--the numbers are slowly, steadily swinging in the favor of aviation. The U.S. and international economies will expand rapidly over the next two years. Moderate growth thereafter is expected through 2015.

That marks a 12-year pendulum that is sure to sway aviation along with it. The large air carriers and regionals/commuters will grow at an annual rate of 4.3 percent over the forecast period. Passenger demand will return to pre-September 11th levels by 2005.¹ When all is said and done, the number of passengers will climb above 1 billion by 2014.

Those numbers don't tell half of the story. International and domestic markets will recover strongly over the next 2 years. The growth of regional/commuter passenger traffic in the U.S. will continue to outpace that of its larger domestic counterparts--6.4 percent compared to 3.6 percent annually.

¹ All references of comparison to the pre-September 11th period use fiscal year 2000 (October 1999 to September 2000) as the base year.

We expect that low-cost carriers and regionals/commuters could account for more than half of all domestic passengers by the end of the 12-year forecast period.

The forecast for air cargo and general aviation indicates growth as well.

Terrorism and fuel prices remain a concern. The profitability of commercial aviation hinges on business travel returning sufficiently to improve revenue streams.

This forecast confirms what the industry has long known: air travel remains the mode of choice for long distance travel, both in the U.S. and abroad. Aviation is faster and safer. This forecast indicates that it will stay that way through 2015.

REVIEW OF 2003

In the 7 years prior to the September 11th terrorist attacks, the U.S. and world commercial and civil aviation community achieved a period of unprecedented growth in both the demand for aviation services and profitability. The impact of the terrorist attacks on airlines, travel markets, and economic growth was immediate,

significant, and worldwide, although the greater impact occurred in the United States. While the U.S. and world aviation industries have both begun to recover, for various reasons, there are differing levels of recovery around the world.

In the U.S., what started as a fairly strong recovery in the demand for aviation services began to wane in the second quarter of the fiscal year 2003. Sluggish traffic demand, coupled with increased competition from the low-cost carriers for the high-end business traveler, forced the network carriers to continue discounting to fill empty seats, thus continuing the industry's poor financial performance for a third consecutive year. The general aviation industry recorded its third consecutive year of declining shipments and second straight year of decreased billings. The decline was particularly evident in the market for business jets where increasing numbers of used business jets for sale at bargain prices, combined with aircraft cancellations and weakening fractional sales, reduced not only the volume of units sold but also put significant pressure on pricing as well.

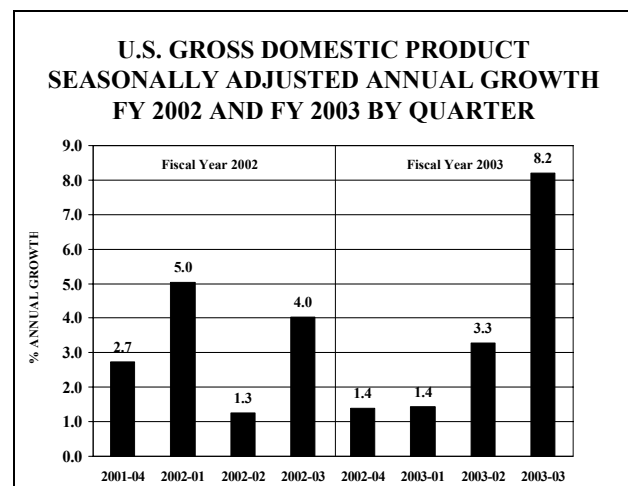
The greatest impact from the events of September 11th occurred during the fourth quarter of calendar year 2001 (the first quarter of fiscal year 2002). Consequently, the recovery (growth) will appear strongest in 2003 on a fiscal year basis and in 2002 on a calendar year basis. Historically, the difference between calendar and fiscal year results and growth rates has varied only slightly. However, the difference is relatively large between the calendar and fiscal year growth rates for the 2001 to 2003 time period. Where appropriate, statistics and growth rates are noted on both a fiscal and calendar year basis.² In addition, summary Table I-10 provides calendar year

² All stated years and quarters for U.S. economic and U.S. air carrier traffic, and financial data and forecasts are fiscal years (October 1 through September 30); all stated years and quarters for international economic and world traffic and financial data and forecasts are calendar years (CY), unless otherwise denoted.

traffic statistics and growth rates for selected aviation demand measures.³

UNITED STATES AND WORLD ECONOMIC ACTIVITY

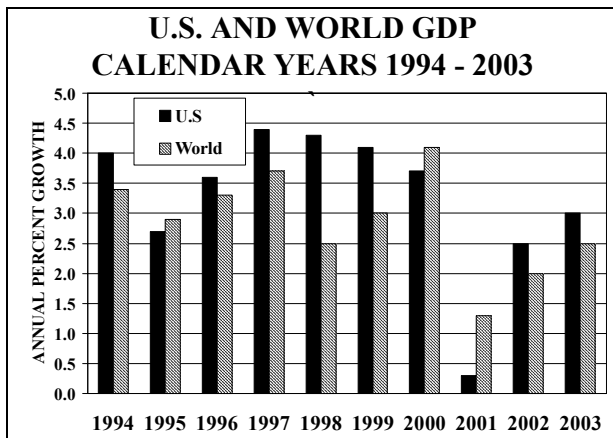
On an annual basis, U.S. Gross Domestic Product (GDP) grew by 1.7 and 2.7 percent in fiscal year 2002 and 2003, respectively. This compared to an average of 3.2 percent annual growth during the previous 10-year expansion period. Seasonally adjusted quarterly growth has ranged from a low of 1.3 percent in 3rd quarter FY 2002 to a high of 8.2 percent in 4th quarter FY 2003, the latter reflecting the impact of the mid-year 2003 tax cut. However, the recent broad expansion in U.S. economic activity (up an average 5.8 percent over the last half of FY 2003) is expected to continue well into 2004.



U.S. inflation (as measured by the consumer price index [CPI]) averaged 1.5 percent in FY 2002 and 2.4 percent in FY 2003. The relative difference in the annual rates of the CPI in 2002 and 2003 reflects, to some degree, the change in fuel prices in those years—down 14.1 and up 17.7 percent, respectively.

³ See page I-37.

Globally, economic gains averaged about a half percentage point less than those of the United States during the past economic expansion. World GDP growth also slowed considerably during the past 3 years, averaging 1.3 percent in 2001, 2.0 percent in 2002, and 2.5 percent in 2003. The slowdown was due, in part, to the growing dependency of many world economies on export trade with the United States.



On a calendar year basis, economic growth in Canada is expected to average almost half that of the United States in CY 2003—up 1.7 percent compared to 3.0 percent. The combined economies of the Asian/Far East nations are expected to grow at an annual rate of 3.6 percent in 2003, the growth buoyed by strong economic activity in China (up 8.3 percent) and the start of the long anticipated economic recovery in Japan (up 2.2 percent). The economies of the Europe/Middle East/Africa nations are expected to grow by only 1.2 percent in 2003, partly the result of relatively sluggish growth in Eurozone countries (up 0.5 percent)⁴. Economic growth in Latin American countries, weakened by political and social tensions in Venezuela (down 10.5 percent) and economic slowdowns in Uruguay (down 0.1 percent) and Brazil (up 0.4 percent), is expected to be only 1.2 percent in 2003.

⁴ Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain.

COMMERCIAL AVIATION

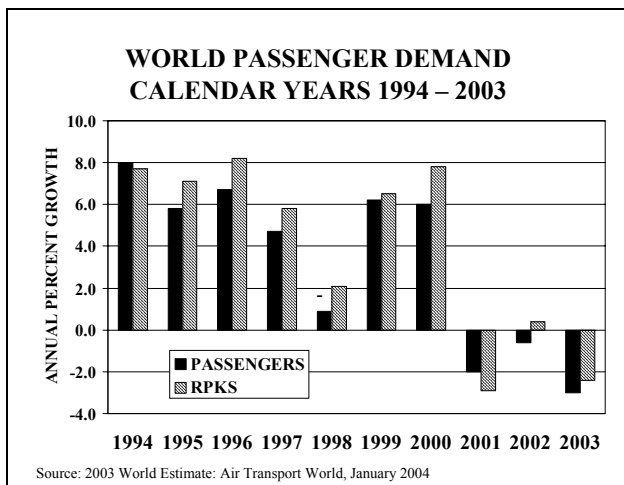
The Severe Acute Respiratory Syndrome (SARS) epidemic and, to some extent the war in Iraq, have amply demonstrated how sensitized global air travel has become to any form of extraordinary event. The demand for air travel both within the U.S. and between the U.S. and other world travel regions declined significantly following the onset of these two events, once again forcing both U.S. and foreign flag carriers to reduce scheduled flights. Worldwide travel demand, both local and international, was also impacted by these two events, forcing world airlines to adjust schedules accordingly.

World Travel Demand

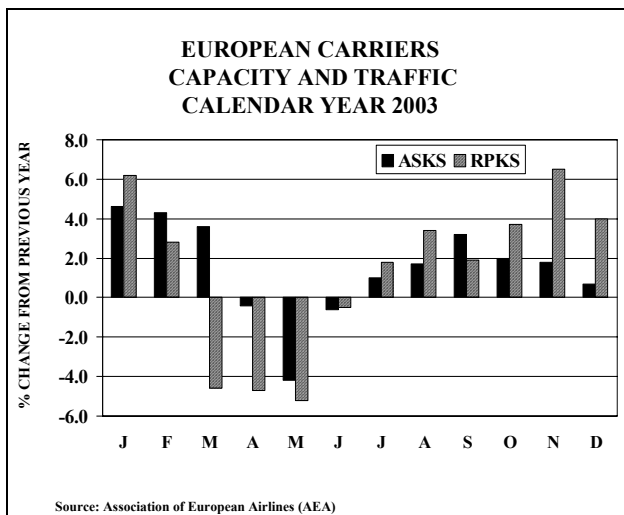
The relatively strong growth in both U.S. and world GDP prior to September 11th was largely responsible for the strong demand for world aviation services exhibited between 1993 and 2000—revenue passenger kilometers (RPKs) and passengers up 6.4 and 5.4 percent annually over the 8-year time period.

Worldwide RPKs and passengers declined 2.9 and 1.9 percent, respectively, in 2001. In 2002, RPKs increased 0.4 percent while the number of passengers transported declined 0.6 percent. However, RPKs and passengers both remain 2.5 percent below 2000 levels. Although worldwide traffic results are not available for full year 2003, *Air Transport World* estimates that world RPKs will decline by 2.4 percent and the number of passengers carried will decline by 3.0 percent in 2003.⁵

⁵ *Air Transport World*, January 2004

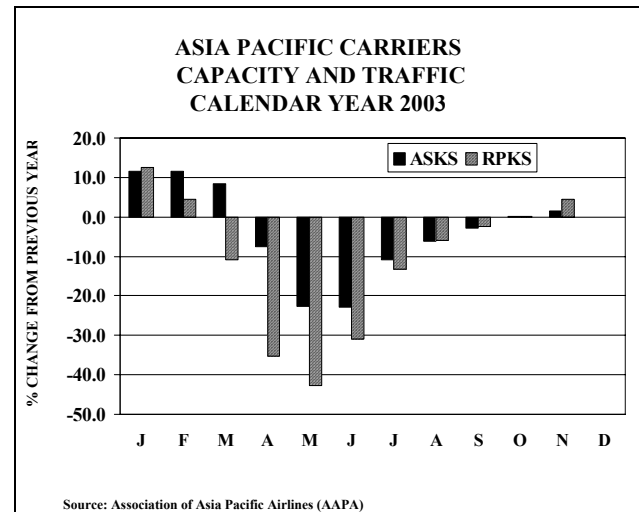


Statistics from the Association of European Airlines (AEA) indicate increases of 1.2 percent in RPKs and 1.4 percent in available seat kilometers (ASKs) for calendar year 2003. Although positive, these numbers would have been significantly higher except for the impact of SARS and the war in Iraq. Traffic and capacity during the March to May period showed declines of 4.8 and 0.4 percent, respectively. Traffic to the Far East/Australia markets was down 18.7 and 3.3 percent during the same period.



The Association of Asian Pacific Airlines (AAPA) reported declines of 11.0 percent in RPKs and 4.0 percent in ASKs for the 11 months ending November 2003. For the 3-month period April to June, the height of the SARS epidemic, traffic and capacity were down 35.9 and 17.3 percent, respectively. Both traffic

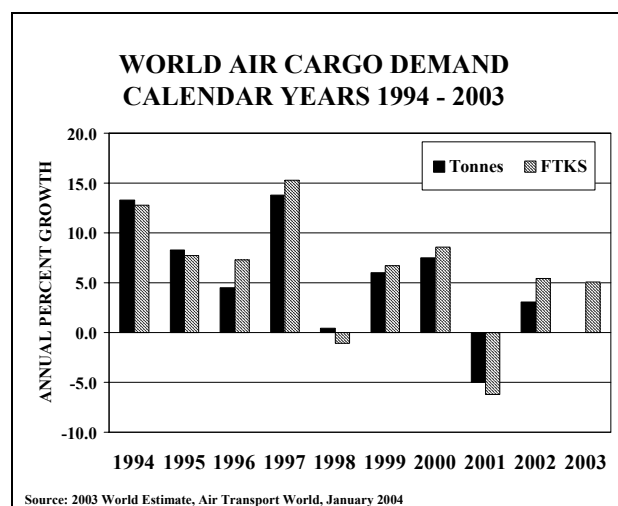
and capacity turned positive in October—RPKs up 0.2 and 4.5 percent, respectively, in October and November; ASKs up 0.1 and 1.5 percent over the same period.



In CY 2003, it is estimated that U.S. and foreign flag carriers combined transported a total of 116.9 million passengers between the United States and the rest of the world, a decline of 3.2 percent from 2002. Passenger traffic volume is estimated to have declined in three of the four world travel regions in 2003--Asia/Pacific markets, 19.5 million (down 12.3 percent); transborder Canadian markets, 17.3 million (down 5.4 percent); and Atlantic markets, 43.2 million, (down 0.5 percent). Passenger demand was up 0.1 percent (36.9 million) in Latin American markets.

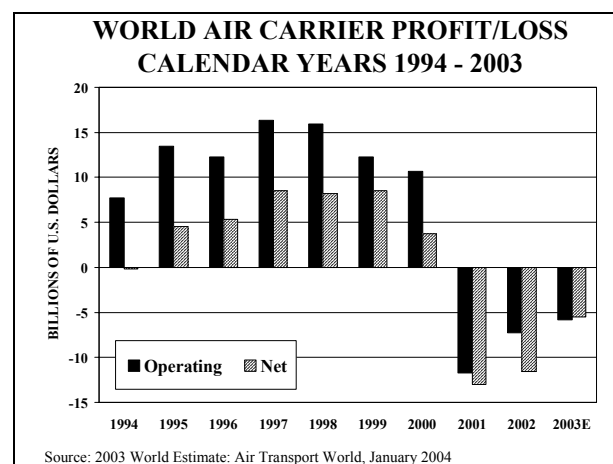
Prior to 2001, air cargo demand grew at a faster pace than passenger demand, with worldwide freight tonnes and freight ton kilometers (FTKs) growing at average annual rates of 8.6 and 8.0 percent over the 1994-2000 period. However, a slowing in U.S. economic activity and imports from key world regions, combined with the collapse of the high-tech industry and the demand for information technology equipment, resulted in significant decline in the demand for air cargo services worldwide in 2001--freight tonnes and FTKs down 5.0 and 3.9 percent, respectively. However, worldwide cargo demand has responded positively to stronger economic activity throughout the

world, with freight tonnes and FTKs up 3.1 and 1.6 percent in 2002. *Air Transport World* estimates that worldwide FTKs will increase by 5.1 percent in 2003.⁶



In 2003, AEA statistics indicate its members' FTKs were up 2.5 percent. AAPA statistics show an increase of 3.7 percent over the January to November period.

Based on data compiled by the International Civil Aviation Organization (ICAO), world air carriers (including U.S. airlines) reported cumulative operating and net profits totaling \$89.0 and \$42.0 billion, respectively, over the 7-year period ending in 2000. However, the events of September 11th, combined with a worldwide slowdown in economic activity, resulted in record operating losses of \$11.8 in 2001 and \$7.3 billion in 2002. Net losses totaled \$13.0 billion in 2001 and \$11.7 billion in 2002. Preliminary estimates by *Air Transport World* indicate that worldwide operating and net losses could total \$5.8 and \$4.4 billion, respectively, in 2003.⁷



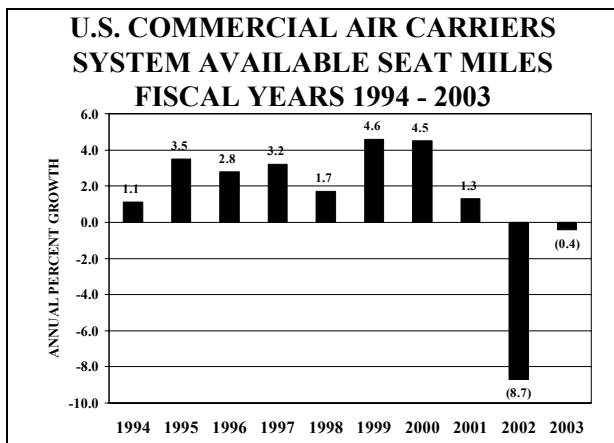
U.S. Travel Demand

The U.S. commercial aviation industry consists of 40 large air carriers (operate jet aircraft with over 70 seats) and 75 regionals/commuters (operate smaller piston, turboprop, and jet aircraft) who provide both domestic and international passenger service between the U.S. and foreign destinations. Additionally, there are 26 large all-cargo carriers who provide domestic and/or international air cargo service.

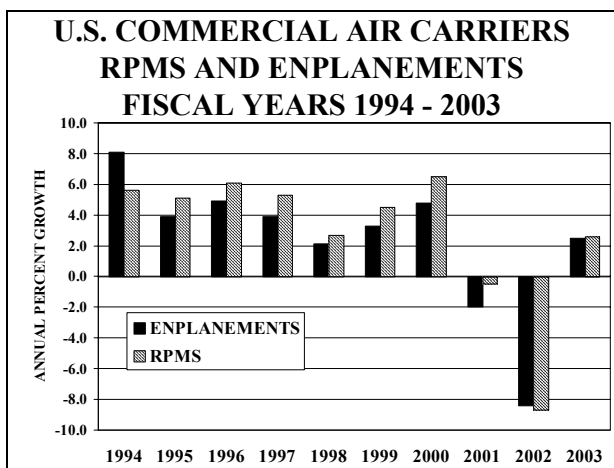
Commercial air carriers sharply reduced capacity in the months that followed the events of September 11th. Although capacity has recovered from the low levels flown in the months immediately following the terrorist attacks, capacity has yet to return to pre-September 11th levels. After growing at an average annual rate of 2.9 percent during the 1994-2000 period, U.S. commercial air carrier system capacity (domestic plus international), as measured by available seat miles (ASMs), has declined for the past 2 years—down 8.7 percent in 2002 and 0.4 percent in 2003.

⁶ *Air Transport World*, January 2004

⁷ Ibid.



During the 1994-2000 period, U.S. commercial air carrier system revenue passenger miles (RPMs) and passenger enplanements grew at annual rates of 5.1 and 4.3 percent respectively. Following the events of September 11th, traffic levels declined in both 2001 and 2002, with RPMs and enplanements down a combined 9.1 and 10.3 percent, respectively, over the 2-year period. However, both RPMs and enplanements increased in 2003—up 2.6 and 2.5 percent, respectively. Despite increased traffic levels in 2003, passenger demand remains below pre-September 11th levels.

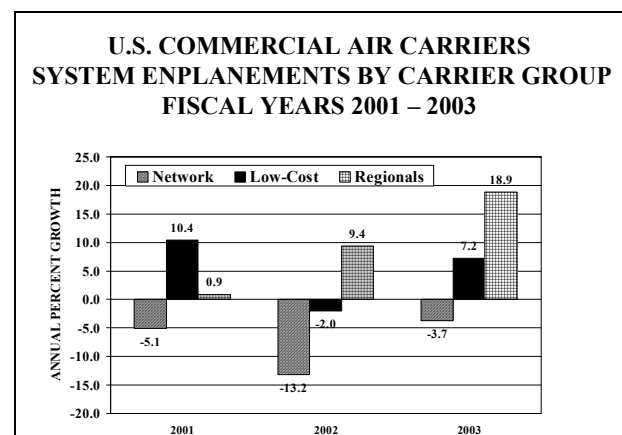


U.S. commercial air carriers achieved an all-time high load factor of 72.8 percent in 2003, up 2.1 points over the previous year.

In CY 2003, it is estimated that commercial air carrier system capacity and traffic will increase/decrease as follows: ASMs down

1.5 percent; RPMs up 0.4 percent; and enplanements up 1.0 percent.

There are three distinct trends that have emerged within the commercial aviation passenger market since the events of September 11th, trends that have, in effect, reshaped the industry. The first is the major restructuring and downsizing that has occurred among the legacy network carriers.⁸ The second is the rapid growth among the low-cost carriers,⁹ particularly in nontraditional long-distance markets. The third trend is the phenomenal growth that has occurred among regional/commuter carriers, this trend due, in large part, to downsizing among the legacy carriers. These trends will be discussed more fully in subsequent sections that follow.



The combined enplanements of the low-cost carriers and regionals/commuters have increased by 22.5 percent since 2000, totaling 236.0 million in 2003. In 2003, the combined passenger count represented 36.8 percent of system commercial enplanements, up from 27.6 percent in 2000.

⁸ Alaska Airlines, American Airlines, Continental Airlines, Delta Air Lines, Northwest Airlines, United Airlines, and USAirways.

⁹ American Trans Air, America West Airlines, AirTran, Frontier Airlines, JetBlue Airways, Southwest Airlines, and Spirit Air Lines.

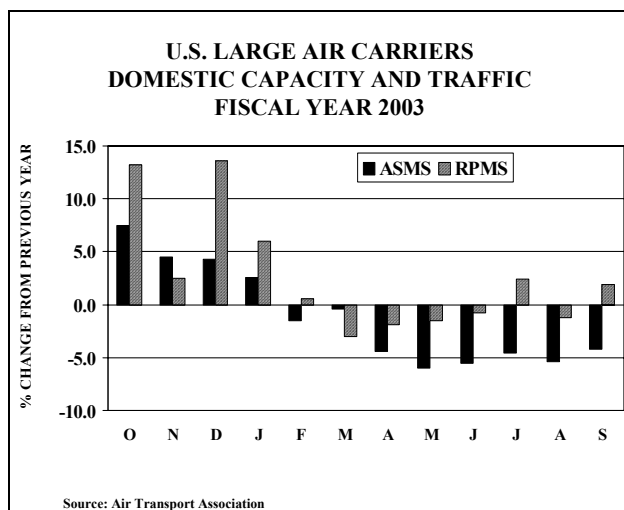
Large Passenger Air Carriers

In fiscal 2003, the large U.S. air carriers' system ASMs (the sum of domestic and international services) declined by 1.8 percent, this on top of a 9.9 percent decline in 2002. Passenger demand was mixed in 2003, with RPMs up 1.2 percent and enplanements down 0.3 percent. The system-wide load factor increased 2.2 points to 73.4 percent in 2003, an all-time high.

Domestic Markets

Domestic capacity (50 states, Puerto Rico, and the U.S. Virgin Islands) was down 1.5 percent in 2003, the decline due largely to the schedule reductions implemented in April in response to reduced passenger demand resulting from the war in Iraq. Domestic capacity was up 2.6 percent during the first half of fiscal year 2003, but declined 5.3 percent during the latter half of the year.

Despite posting positive gains during the first half of fiscal year 2003—RPMs and enplanements up 5.0 and 2.4 percent respectively—overall results were mixed in 2003. Domestic RPMs and passenger enplanements declined 0.3 and 3.7 percent, respectively, over the last 6 months of the year. For the entire year, domestic RPMs were up 2.2 percent while enplanements declined 0.8 percent. Despite the gains achieved in 2003, domestic traffic levels, as a whole, remain considerably below pre-September 11th levels.



The large air carriers achieved an all-time high load factor of 72.7 percent in fiscal 2003, an increase of 2.6 points over the previous year.

In calendar year 2003, it is estimated that large air carrier domestic capacity and traffic will increase/decrease as follows: ASMs down 2.5 percent; RPMs up 0.3 percent; and enplanements down 2.1 percent.

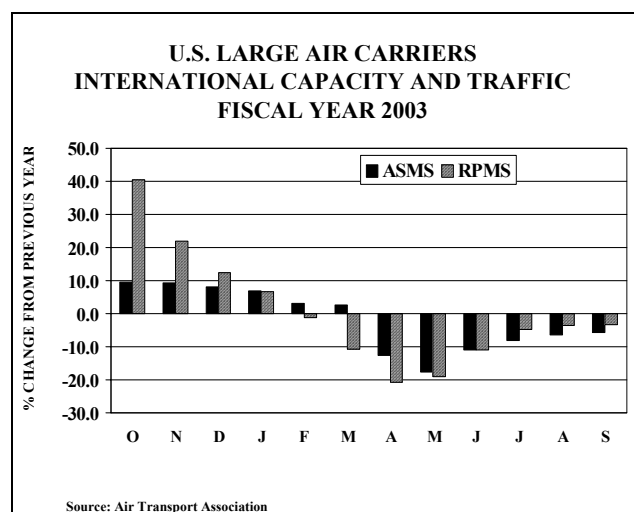
Since 2000, the legacy network carriers have reduced their domestic capacity by 16.8 percent while the low-cost carriers have reported capacity increases of 25.9 percent. Owing to the large reductions in capacity, legacy carriers have seen their traffic fall by similar amounts--RPMs and enplanements down 14.8 and 21.7 percent, respectively. During this same time period, low-cost carrier RPMs and enplanements have increased 28.1 and 16.0 percent, respectively. The bottom line result is that the legacy carriers' share of domestic capacity flown by large air carriers has fallen from 82.9 percent in 2000 to 76.2 percent in 2003 while their share of traffic (RPMs) has fallen from 83.1 to 76.8 percent.

International Markets

International capacity and traffic were both impacted by the war in Iraq and SARS in fiscal year 2003. International ASMs declined 2.8 percent in 2003, this on top of a 13.9 percent

decline in 2002. However, all of the loss occurred during the latter half of the year--down 10.3 percent compared to an increase of 5.9 percent during the first 6 months of the year. Capacity was up 0.9 percent in Latin American markets but declined in the other two world travel regions. For the full year, capacity in Pacific markets was down 4.7 percent--down 20.0 percent over the last 6 months of the fiscal year. Capacity in Atlantic markets declined 3.4 percent in 2003--down 9.9 percent over the latter half of the year.

International RPMs declined 1.6 percent in fiscal 2003, with all of the loss (down 10.2 percent) occurring during the last 6 months of the year. RPMs were up 5.2 percent in Latin American markets but down 5.7 and 2.0 percent, respectively, in Pacific and Atlantic markets. Over the last 6 months of 2003, RPMs were down 16.3 percent in Pacific markets and down 10.5 percent in Atlantic markets.



International passenger enplanements were up 4.4 percent in 2003, this despite a 3.8 percent decline during the latter half of the year. In 2003, enplanements were up 8.6 percent in Pacific¹⁰ markets and 7.3 percent in Latin

American markets. Enplanements declined 1.1 percent in Atlantic markets.

International load factors averaged 75.5 percent in 2003, up 0.9 percentage points over the previous year. The highest load factor was achieved on Atlantic markets (78.1 percent), followed by 76.6 and 69.3 percent, respectively, on Pacific and Latin American markets.

In calendar year 2003, it is estimated that international capacity and traffic will decrease as follows: ASMs down 5.3 percent; RPMs down 5.3 percent; and enplanements down 0.2 percent.

Large Cargo Air Carriers

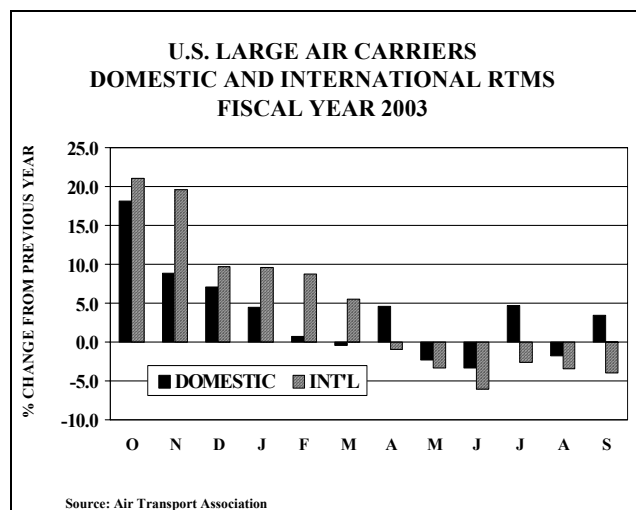
In the aftermath of the September 11th attacks, the FAA issued a new security directive to strengthen security standards for transporting cargo on passenger flights. This directive has impacted air cargo activity, diverting a portion of the freight and mail cargo from passenger to all-cargo carriers. In November 2003, the Transportation Security Administration (TSA) issued additional security directives impacting the transportation of cargo on both passenger and all-cargo flights.

The recovery in U.S. cargo activity has been somewhat stronger than that of passenger traffic, reflecting, in part, the recovery currently underway in both U.S. and world economic activity. U.S. air carrier cargo revenue ton miles (RTMs) increased 18.5 percent in fiscal 2003, up 13.1 percent in domestic markets and up 23.1 percent in international markets. However, these growth rates are distorted since they include a number of changes implemented by the DOT in 2003 regarding the reporting requirements for air cargo carriers. In domestic markets, Airborne Express reported traffic on a comparable basis with other carriers for the first time in 2003. Without Airborne, domestic growth would have been 7.7 percent. In international markets, contract services by U.S.

¹⁰ Based on traffic figures reported by the Air Transport Association, Pacific market enplanements declined 1.9 percent in fiscal 2003. It appears that there are problems with the DOT enplanement data reported in years prior to 2003, thus inflating the growth in 2003.

carriers for foreign flag carriers were reported for the first time in 2003.¹¹

In 2003, all-cargo carriers transported 74.8 percent of domestic RTMs and 62.6 percent of international RTMs, up from 70.0 and 49.3 percent, respectively, in 2000.



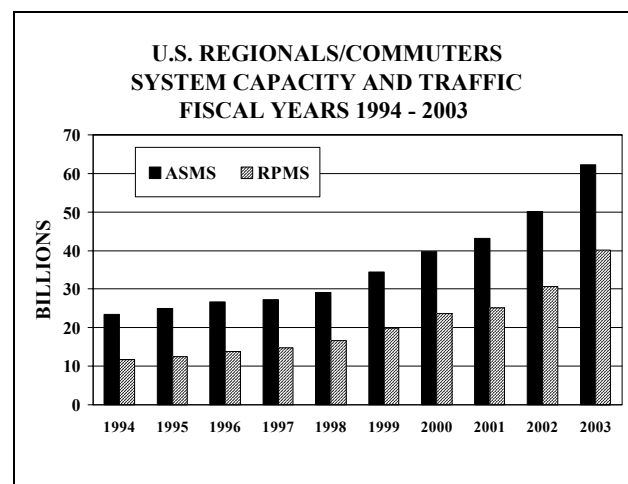
Regionals/Commuters

Although regional/commuter carriers were impacted by the events of September 11th, the negative impact was of relatively short duration and most of the impact since appears to have been largely positive. This is due, in large part, to the fact that the regionals/commuters have been the beneficiary of the restructuring and downsizing that is taking place among their larger code-share partners. This has allowed the larger carriers to rationalize their capacity and cut costs while still maintaining a presence in the markets transferred to their smaller code-share partners.

Regional/commuter capacity has grown rapidly since the introduction of the new regional jets in 1993, up an average of 11.4 percent a year. Regional/commuter ASMs were up 24.0 percent in fiscal 2003 (up 54.4 percent since 2000), 24.0 percent in domestic markets and

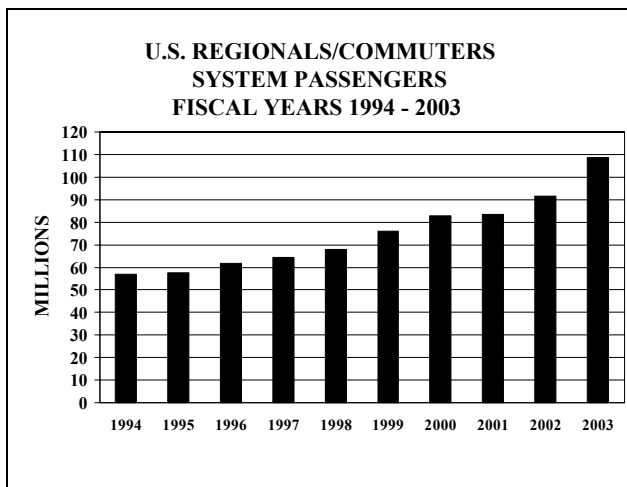
26.8 percent in international markets. A large part of the increase is due to the fact that the average flight stage and passenger trip length increased 26.0 and 34.4 miles, respectively, in 2003. This reflects the fact that the routes transferred from the larger partners tend to be in medium-haul, non-traditional regional markets that can be flown more efficiently by smaller regional jets. This fact becomes clearer when it is noted that the number of regional/commuter departures increased just 3.6 percent in 2003.

Regional/commuter traffic also continued to grow in 2003. System RPMs were up 31.0 percent (up 70.2 percent since 2000), 31.3 percent in domestic markets and 23.1 percent in international markets. In addition, regionals/commuters achieved an all-time high load factor of 64.7 percent in 2003, up 3.4 percentage points over the previous year.



Regionals/commuters enplaned a total of 108.7 million passengers in fiscal 2003, up 18.9 percent over 2002 and 31.3 percent over 2000. Domestic passengers totaled 105.1 million (up 18.6 percent) while international passengers totaled 3.6 million (up 26.9 percent). The large disparity in growth relative to passenger miles is due to the large increase in stage and passenger trip length.

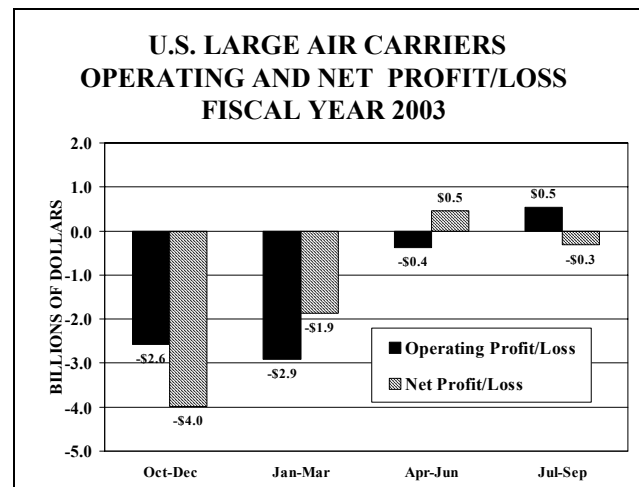
¹¹ Air Transport Association statistics indicate that U.S. international RTMs increased 4.1 percent in fiscal 2003.



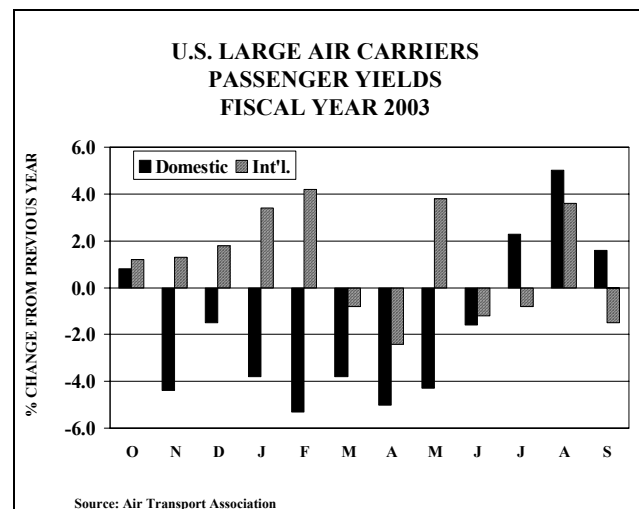
In calendar year 2003, it is estimated that system regional/commuter capacity and traffic will increase as follows: ASMs up 25.7 percent; RPMs up 29.9 percent; and enplanements up 17.6 percent.

U.S. Air Carrier Financial Results

Prior to the start of the 2nd quarter of fiscal year 2001, large commercial air carriers had strung together 24 consecutive profitable quarters; a period during which the carriers reported cumulative operating and net profits totaling \$43.9 and \$22.3 billion, respectively. The large carriers have now incurred losses in 10 of the last 11 quarters, with cumulative and net losses totaling \$19.8 and \$20.0 billion, respectively. Operating and net losses are expected to total \$5.3 and \$5.7 billion, respectively, in fiscal 2003--a significant improvement over losses of \$10.5 billion and \$10.7 billion, respectively, in 2002. Losses would have been greater in 2003 had the industry not received \$2.3 billion in Transportation Security Administration Airline Relief payments in May plus an additional \$100 million in September as reimbursement for reinforcing cockpit doors. The payments are included in the carriers' financial filings for 2003.



Operating revenues (passenger and cargo) were up 5.2 percent in fiscal year 2003, this despite continuing weak traffic (RPMs up only 1.2 percent) and depressed passenger yields (down 0.2 percent). The weakness in passenger yields reflects a number of factors, including lower business fares; reduced business travel demand; the war with Iraq; the SARS epidemic; and increased competition from low-cost airlines.



On the other hand, operating expenses were up only 1.1 percent despite a 22.0 percent increase in jet fuel prices. Reduced operating expenses are due, in large part, to capacity reductions and strict adherence to stringent cost reduction measures.

In 2003, the seven legacy network carriers reported operating and net losses of \$6.8 billion

and \$6.7 billion, respectively. Two carriers—American and United—accounted for over 60 percent of the operating loss. On the other hand, the seven low-cost carriers reported operating and net profits of \$680.9 million and \$579.0 million, respectively. Although Southwest accounted for almost 70 percent of the group's operating profit, all but two of the low-cost carriers reported operating profits in 2003. The remaining 20 passenger airlines reported operating and net profits of \$46.4 million and \$49.5 million, respectively, in 2003.

Contrary to the passenger airlines, all-cargo carriers have basically remained profitable over the past several years. In 2003, this carrier group reported an operating profit of \$768.0 million and a net profit of \$368.1 million. FedEx and United Parcel accounted for almost 84 percent of this group's operating profits.

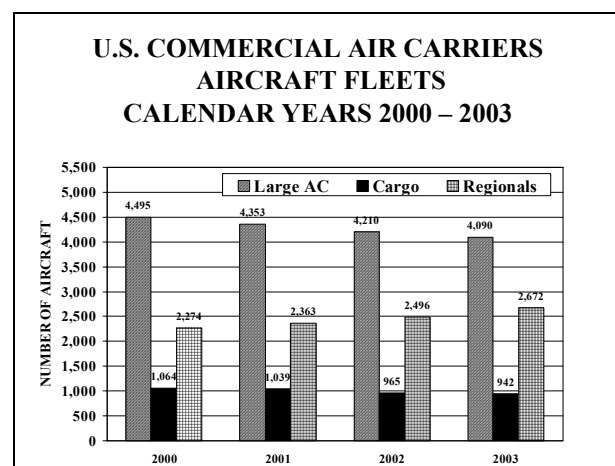
The regional/commuter airline industry posted an operating profit of \$641.6 million for the 12 months ending June 2003, a significant improvement over the loss of \$106.8 million reported for the same period a year earlier. Operating revenues and expenses were up 15.4 and 6.7 percent, respectively. During this same period, regionals/commuters reported a net profit of \$381.5 million compared to a net loss of \$157.9 million for the previous 12-month period.

U.S. Commercial Air Carrier Fleets

In the immediate aftermath of September 11th, many of the larger airlines grounded large numbers of their older, less efficient aircraft and deferred delivery of many of the new aircraft scheduled for delivery over the next several years. In addition, some carriers have continued to ground additional aircraft as part of their restructuring and cost reduction efforts. As of December 14, 2003 Airclaims, Ltd. estimates

that a total of 2,095 aircraft remain grounded. Many in the industry believe that only a small fraction of these aircraft will ever return to active service.

The number of aircraft in the U.S. commercial fleet (including regionals/commuters) is estimated to total 7,704 in 2003, a decline of 33 aircraft from 2002. This includes 4,090 large air carrier passenger aircraft (over 70 seats), 942 large air carrier cargo aircraft, and 2,672 regional/commuter aircraft (jets, turbo-props, and pistons).



The large air carrier passenger fleet declined for a third consecutive year in 2003. Over the 3-year period, the large air carrier passenger fleet has declined by 405 aircraft—down 142 aircraft in 2001, 143 aircraft in 2002, and 120 aircraft in 2003. During this same 3-year period, the legacy network carriers' fleet has declined by 476 aircraft while the low-cost carriers' fleet has increased by 133 aircraft.

The large air carrier cargo fleet has declined for 3 successive years—down 25 aircraft in 2001, 74 aircraft in 2002, and 23 aircraft in 2003. On the other hand, the regional/commuter fleet has increased by a total of 398 aircraft over the past 3 years. During this 2-year period, a total of 751 regional jets were added to the fleet while the numbers of turboprops/pistons have declined by 353 aircraft.

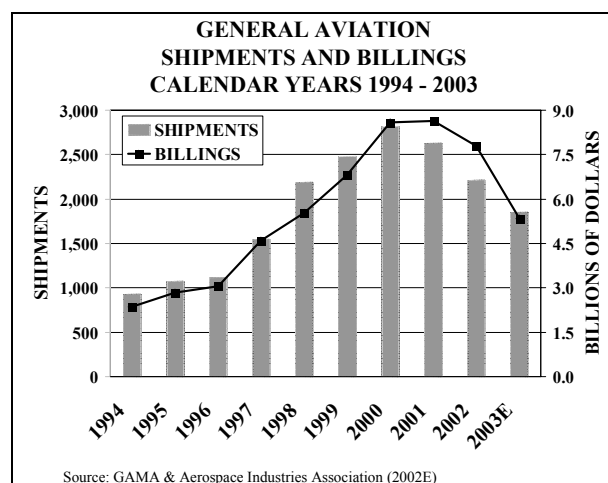
Worldwide orders for commercial jet aircraft totaled 614 during the first 3 quarters of 2003, a 46.2 percent increase over the same period in 2002. Most of this increase is due to a 229 percent increase (from 72 to 237) in orders for the smaller regional jets. However, orders for the larger Boeing and Airbus jet aircraft were up 8.3 percent during the first 9 months of 2003. Although up over 2002, aircraft orders remain significantly below prior year levels.

A total of 639 commercial jet aircraft were delivered worldwide during the first 3 quarters of 2003, an 11.1 percent decline over the same period in 2002. This included delivery of 235 regional jets (up 8.3 percent) and 404 large jet aircraft (down 19.5 percent).

GENERAL AVIATION

Based on reports released by the General Aviation Manufacturers Association (GAMA), industry shipments declined 8.7 percent during the first 3 quarters of 2003, the third consecutive year of decline. Business jet shipments declined for a second consecutive year, down 31.7 percent during the same period. Billings declined for a second consecutive year in 2003, down 21.6 percent. The one bright spot among otherwise negative statistics is that piston aircraft shipments were up slightly in 2003, providing some indication that the array of new aircraft models has stimulated sales in the low end of the market. Based on projections by the Aerospace Industries Association of America (AIA), general aviation aircraft shipments are expected to total 1,853 in full year 2003, a decline of 15.9 percent. AIA also projects that industry billings will decline 27.2 percent to \$5.3 billion in 2003.¹²

¹² 2003 Year-end Review and 2004 Forecast—An Analysis, Aerospace Industries Association of America, December 2003.



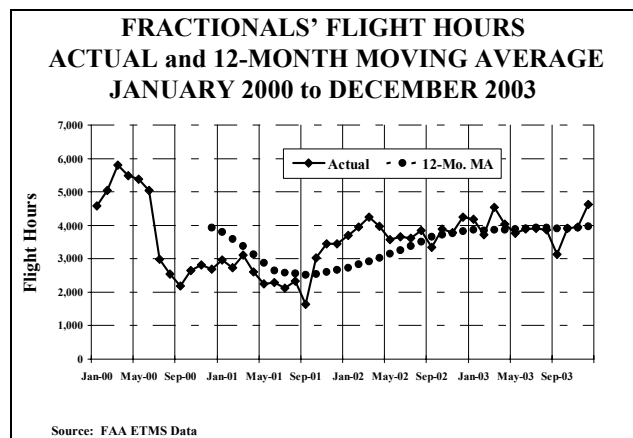
General aviation activity at FAA air traffic facilities was, for the most part, negative in 2003. Operations at combined FAA and contract towers declined 5.6 percent in 2003 (down 11.0 percent since 2000) with itinerant and local operations both down a like amount. Instrument activity at combined FAA and contract towers was down 5.2 percent.

While the number of general aviation IFR aircraft handled at FAA en route centers was down 2.2 percent in 2003, there were some encouraging trends in oceanic statistics. General aviation oceanic departures were up 10.9 percent while oceanic overflights increased 5.7 percent. These trends provide some credence to assertions that corporate/business flyers are turning more toward private/company jets to conduct international business in times of heightened security.

Based on the results of the FAA's General Aviation and Air Taxi Activity and Avionics Survey, both the general aviation active fleet and hours flown remained basically static in 2002. In 2002 the active general aviation fleet totaled 211,244 (down 0.1 percent) and flew an estimated 27.0 million hours (up 0.1 percent). Based on reported general aviation activity at FAA air traffic facilities in 2003, the active fleet is projected to remain fairly static in 2003 while general aviation hours flown decline 1.3 percent. The expected decline in general aviation flight hours is based on a combination of activity at FAA/contract towers (down

5.7 percent) and reported activity from FAA's Enhanced Traffic Management System (ETMS) database—IFR flight hours up 1.1 percent.

Despite a noted slowdown over the past several years, the business/corporate segment continues to be the segment that offers the greatest potential for future growth for the industry, where it is hoped that increased growth in fractional ownership companies and corporate flying will expand the market for jet aircraft. Based on ETMS data, fractional aircraft activity continues to outpace the rest of the industry, with flight hours up 3.8 percent in 2003. This compares to an increase of 2.7 percent for all jets and an increase of 0.9 percent in flight hours for non-jets.

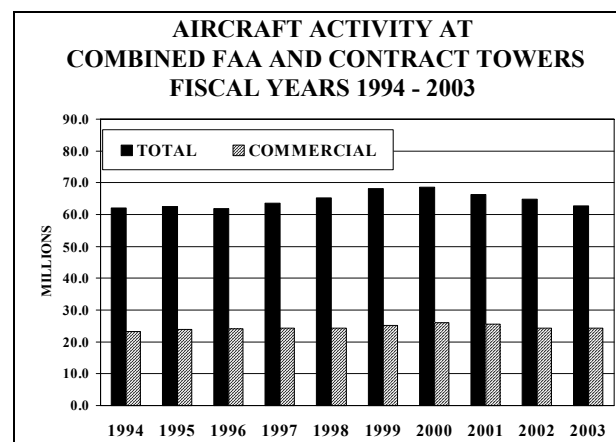


The key to the future of general aviation is increased numbers of student pilots. Based on statistics compiled by the FAA's Registry, the number of student pilots increased by 1.5 percent in 2003 following three consecutive years of decline. The industry has, over the past several years, instituted a number of industry-wide programs designed to attract new pilots to general aviation. The future of the general aviation industry will depend, in large part, on how successful the industry is in continuing to rebuild and stimulate new interest in these programs.

FAA WORKLOAD

During the 1997-2000 time period, the demand for both commercial and general aviation services at FAA air traffic facilities expanded significantly--up 2.6 percent annually at combined FAA and contract towers and up 3.3 percent a year at en route centers. It is this growth that gave rise to the delays that plagued aviation at many U.S. commercial airports in 2000 and 2001. After the events of September 11th, delays became much less of an issue as activity at FAA air traffic facilities declined. However, as demand for air travel recovers, changes in the mix of aircraft using the system (fewer large jets, more regional jets) is fueling an increase in delays at some airports in the country.

During 2003, total activity at combined FAA and contract tower airports (62.7 million), declined by 3.3 percent while the number of IFR aircraft handled at en route centers (43.7 million) remained basically static. At the end of 2003, combined activity at FAA and contract towers is 8.6 percent below the peak activity level recorded in 2000. Activity at FAA en route centers is 4.9 percent below its 2000 peak level.



Commercial activity (the sum of air carrier and commuter/air taxi) at combined FAA and contract towers was basically flat in 2003 while activity at en route centers was up 0.8 percent.

Air carrier operations at towered airports declined 2.9 percent to a total of 12.8 million, its lowest activity level since 1993. The number of air carrier aircraft handled at FAA en route centers declined 0.3 percent to 22.7 million, its lowest level since 1997. Commuter/air taxi activity was up 3.6 percent at towered airports and 3.8 percent at en route centers.



Non-commercial activity (the sum of general aviation and military) at combined FAA and contract towers declined 5.3 percent in 2003, largely the result of a 5.6 percent decline in general aviation operations. The number of non-commercial aircraft handled at FAA en route centers was down 2.0 percent--general aviation activity down 2.2 percent and military activity down 1.7 percent. Non-commercial activity at combined FAA and contract towers and centers in 2003 is 10.0 and 8.4 percent, respectively, below 2000 activity levels.

The number of traditional (non-automated) services provided at FAA Flight Service Stations (FSS) totaled 27.7 million in 2003, a decline of 6.0 percent from 2002. All categories of flight services decreased in 2003: flight plans originated, down 6.2 percent; pilot briefings, down 6.0 percent; and aircraft contacted, down 5.4 percent.

FAA AEROSPACE FORECASTS FISCAL YEARS 2004 - 2015

The challenges in developing this year's aviation forecasts continue to be daunting. The challenges and uncertainties confronting the aviation industry remain both complex and difficult to quantify. In addition, many are questioning whether past relationships can be viewed as accurate predictors of the future. Nevertheless, the FAA has developed a set of assumptions and forecasts that we believe to be consistent with emerging trends and the structural changes taking place within the aviation industry.

Once again, the main assumption in this year's forecasts is that there will not be any successful terrorist incidents against either U.S. or world aviation. Additionally, the forecasts are based on the assumption that there will not be a major contraction of the industry through bankruptcy or consolidation.

The commercial aviation forecasts and assumptions have been developed around emerging trends with regard to three carrier groupings—the legacy network carriers, low-cost carriers, and regionals/commuters. While strategies and levels of success may differ for each grouping, econometric models and assumptions have been developed to forecast passenger demand for each of the three groups of carriers.

Legacy Network Carriers—It is this group of carriers that were the most negatively impacted by the events of September 11th and, as such, have embarked upon massive restructuring efforts in an attempt to redefine themselves in light of the post September 11th operating environment and new industry realities. These carriers operate hub-and-spoke networks and generally have higher operating costs than their competitors. Their strategies since September 11th have been characterized by downsizing and cost cutting so

as to bring their costs more in line with reduced revenue streams resulting from lower levels of demand. In addition, these carriers hope to narrow the cost gap between themselves and their lowest cost competition. Profitability has remained elusive to most of the carriers in this group.

Low-cost Carriers—This group consists of established low-cost carriers, new entrants, as well as former network carriers who have restructured themselves as low-cost operators. Although impacted by the events of September 11th, these carriers have generally prospered and experienced relatively high growth over the past several years. These carriers operate point-to-point route systems and generally have significantly lower operating costs than their chief competitors. Their strategy since September 11th has been one of growth—growth in the number of airports and city-pairs served, growth in longer distance transcontinental and Florida markets, and growth in the numbers of aircraft in their fleets. Unlike the larger legacy carriers, this group has generally been profitable.

Regionals/Commuters—This grouping consists of approximately 75 carriers who generally operate jet and turboprop aircraft having 70 seats or less. The mission of these carriers has been to provide feeder traffic to their larger code-share or equity partner's hub networks, although a number of the larger regionals/commuters have begun to provide point-to-point service that is often in direct competition with the larger network carriers. Since September 11th these carriers have benefited significantly from the route restructuring and cost cutting of the larger network carriers, taking over service to many medium to long-haul markets previously served by their larger partners. For the most part, these carriers are generally profitable, receiving direct compensation from their partners either through a fixed-fee-per-flight contract or on a prorated fare basis for connecting flights.

The starting point for the commercial aviation forecasts (air carriers and regionals/commuters)

was the future schedules published in the Official Airline Guide (OAG). Using monthly schedules allowed FAA forecasters to develop capacity and demand forecasts on either a monthly (large air carrier) or quarterly (regionals/commuters) basis for the year 2004, then to extrapolate these schedules/demand forecasts into 2005. The long-term forecasts (2006-2015) are based on econometric models that are discussed in subsequent chapters.

The general aviation forecasts once again rely heavily on the assumptions developed at the September 2002 12th FAA/Transportation Research Board (TRB) International Workshop on Future Aviation Activities.¹³ These assumptions have been updated by FAA economists to reflect more recent data and/or actual results, recent trends, as well as additional discussions with industry staff.

As a final step in finalizing this year's forecast, the forecasts and assumptions were presented to numerous industry staff and aviation associations who were asked to comment as to the reasonableness of the assumptions and forecasts. Their comments have been incorporated into the forecasts that are contained herein.

ECONOMIC FORECASTS

The economic forecasts used by the FAA to project domestic aviation demand are provided by the Executive Office of the President, Office of Management and Budget (OMB). In addition to the OMB forecasts, the FAA uses the U.S. macro economic projections of the Congressional Budget Office (CBO) as well as those of Global Insight, Inc., a commercial forecasting service. These alternative forecasts provide the FAA with a range of economic

¹³ Transportation Research Circular Number E-C051, *Future Aviation Activities 12th International Workshop*, Transportation Research Board of the National Academies, January 2003.

forecasts with which to gauge the risk associated with variations from the OMB projections. The FAA uses the world and individual country economic projections provided by Global Insight to forecast the demand for international aviation services.

In any given year there are likely to be variations around the long-term trend. None of the current economic models used by the FAA are sufficiently precise to predict interim business cycles. In addition, the impact from unanticipated developments, such as the 2003 war in Iraq and SARS cannot be predicted.

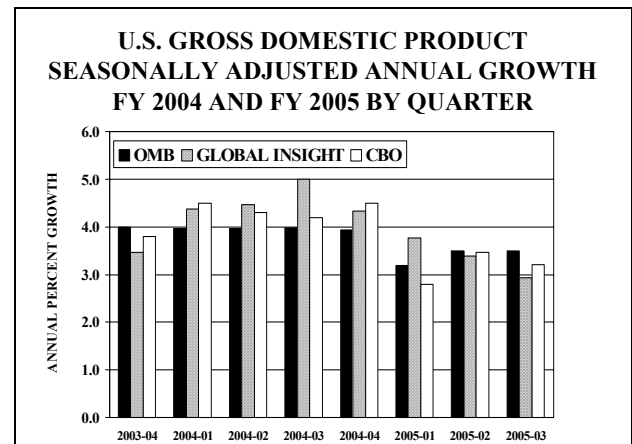
The projected growth of aviation demand discussed in this and subsequent chapters is consistent with the national short and long-term economic growth forecasts discussed in greater detail in Chapter II. Table I-1 (page I-17) summarizes the key U.S. and world economic assumptions used in developing the domestic and international aviation demand forecasts. Annual historical data and economic forecasts are presented in tabular form in Chapter X, Tables 1 through 6.

United States Economy

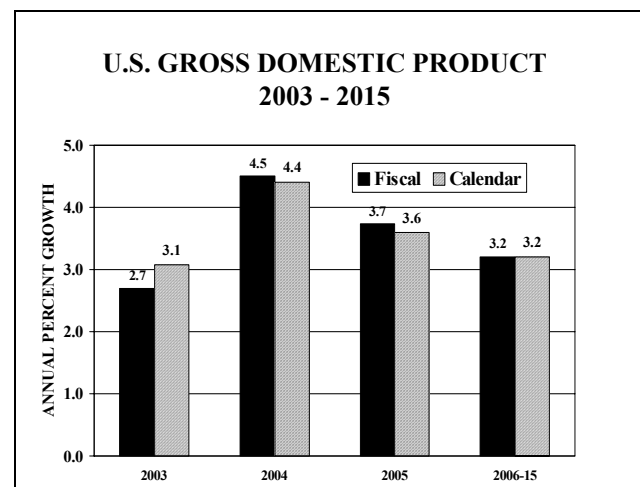
While there is basic agreement among the three economic projections used by the FAA as to the general direction of the U.S. economy—a strong recovery beginning in 2004—there is some variance in both short and long-term growth. There are also some differences regarding future energy prices.

The OMB economic forecasts project that the U.S. economic recovery will be in full upswing in fiscal 2004, with real GDP expanding by 4.5 percent. OMB expects strong growth to continue over the next several years, with U.S. economic activity increasing by 3.7 percent in 2005 and 3.4 percent in 2006.

Global Insight forecasts higher growth in 2004 (4.6 percent) and 2005 (up 4.2 percent), but slower growth in 2006 (3.2 percent). CBO projects slower growth in 2004 (up 4.4 percent), higher growth in 2005 (up 3.9 percent), and lower growth in 2006 (up 3.2 percent).



Over the entire 12-year forecast period, OMB projects U.S. real GDP to grow at an annual rate of 3.3 percent. CBO and Global Insight forecast growth averaging 3.2 and 3.0 percent, respectively, over the same period.



OMB projects that energy prices (as measured by the oil and gas deflator) will increase by 0.7 percent in 2004, decline by 10.0 percent in 2005, and then increase at an annual rate of 1.8 percent over the remainder of the forecast period. Over the entire 12-year period, the OMB forecast assumes that nominal energy prices will increase by only 0.7 percent annually. In real terms, OMB expects energy

TABLE I-1
ECONOMIC FORECASTS
UNITED STATES AND WORLD
FISCAL YEARS 2004-2015

ECONOMIC VARIABLE	HISTORICAL			FORECAST			PERCENT AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
UNITED STATES											
Gross Domestic Product--Chain Weighted (BIL 1996\$)	7,503.6	9,372.5	9,630.2	10,064.5	10,439.6	14,266.7	3.2	2.7	4.5	3.7	3.3
Consumer Price Index (1982-84 = 100)	151.4	178.9	183.1	186.0	188.6	238.0	2.4	2.4	1.6	1.4	2.2
Oil & Gas Deflator (1996 = 100)	95.2	105.4	124.1	124.9	112.4	134.3	3.4	17.7	0.7	(10.0)	0.7
INTERNATIONAL											
Gross Domestic Product (In Billions of U.S. 2000\$)											
World	26,693.3	32,434.7	33,243.4	34,474.3	35,695.8	48,521.6	2.8	2.5	3.7	3.5	3.2
Canada	591.2	762.2	775.0	803.0	831.9	1,102.4	3.4	1.7	3.6	3.6	3.0
Europe*	8,752.8	10,407.4	10,530.5	10,782.5	11,093.0	14,311.9	2.3	1.2	2.4	2.9	2.6
Latin America/Mexico	1,574.3	1,815.3	1,836.7	1,901.2	1,968.8	2,911.9	1.9	1.2	3.5	3.6	3.9
Pacific**	7,096.9	8,581.1	8,885.8	9,243.4	9,601.1	13,647.9	2.8	3.6	4.0	3.9	3.6
EXCHANGE RATES (U.S.\$/Local Currency)											
Canada	0.729	0.637	0.714	0.784	0.802	0.861	(0.2)	12.2	9.7	2.4	1.6
Euro	NA	0.944	1.129	1.242	1.287	1.360	NA	19.6	10.0	3.7	1.6
United Kingdom	1.580	1.501	1.635	1.767	1.813	1.863	0.4	8.9	8.1	2.6	1.1
Japan***	10.631	7.983	8.610	9.228	9.631	11.601	(2.6)	7.9	7.2	4.4	2.5

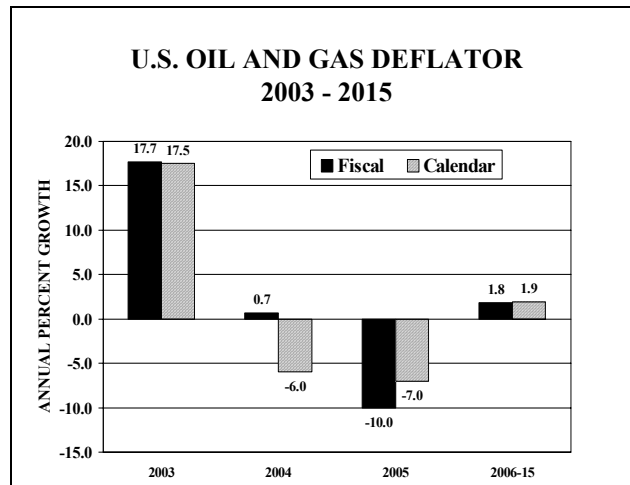
Source: United States: FY 1995-2014; Executive Office of the President, Office of Management and Budget
FY 2015; Consensus growth rate of Global Insight
International CY-1995-2015, Global Insight

* Sum of GDP for Europe, Africa, and Middle East

** Sum of GDP for Japan, Pacific Basin, China, Other Asia, Australia, and New Zealand

*** U.S.\$ per 1,000 Yen

prices to decline at an annual rate of 1.5 percent over the 12-year period. CBO forecasts a 1.5 percent annual increase in nominal fuel prices and an annual decline of 0.9 percent in real prices. Global Insight projects nominal fuel prices to increase by 1.8 percent a year—a decline of 0.5 percent annually in real terms.

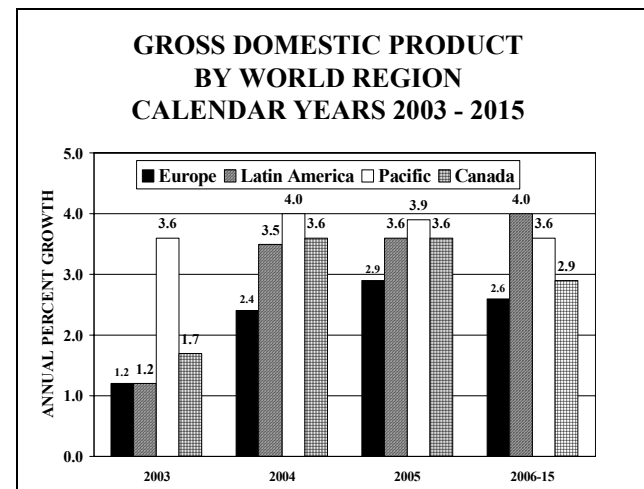


OMB projects that consumer prices (as measured by the Consumer Price Index) will remain at relatively low rates throughout the forecast period, averaging 2.2 percent annually. CBO and Global Insight both predict slightly higher prices over the 12-year forecast period—up 2.4 and 2.3 percent annually.

World Economy

Worldwide economic activity is predicted to expand rapidly over the next several years—up 3.7 and 3.5 percent, respectively, in 2004 and 2005. Over the entire 12-year forecast period, worldwide economic growth is forecast to increase at an average annual rate of 3.2 percent, trailing that of the United States by 0.1 percentage points yearly. Economic growth is forecast to be greatest in the Latin American and Asia/Pacific regions, expanding at annual rates of 3.9 and 3.6 percent, respectively. Economic growth in Canada and Europe/Africa/Middle East countries are

expected to average 3.0 and 2.6 percent, respectively, over the forecast period.



AVIATION TRAFFIC AND ACTIVITY FORECASTS

Total traffic and activity forecasts for commercial air carriers (the sum of larger carriers and regionals/commuters) are summarized in Table I-2 (page I-20). Chapter X--Tables 8 through 11 contains year-to-year historical data and forecasts.

Large commercial air carrier traffic and activity forecasts are summarized in Table I-3 (page I-23) and the forecast assumptions in Table I-4 (page I-24). Chapter III contains a detailed discussion of the large air carrier forecasts and underlying assumptions. Chapter X--Tables 7, 12 through 20, 22, 24, and 25--contains year-to-year historical data and forecasts.

Table I-5 (page I-27) summarizes the regional/commuter forecasts and assumptions. Chapter IV provides a detailed discussion of the forecasts and assumptions. Chapter X--Tables 26 through 30--provides year-to-year historical and forecast data.

Table I-6 (page I-29) summarizes the air cargo forecasts. Chapter III (page III-15, pages III-46 to III-51, and III-53) provides a detailed

discussion of the forecasts and assumptions. Tables 21 and 23 (Chapter X) provide year-to-year historical and forecast data.

Table I-7 (page I-32) summarizes the general aviation forecasts. Chapter V provides detailed discussions of the forecasts and assumptions. Chapter X--Tables 31 through 35--provides year-to-year historical data and forecasts.

Table I-8 (page I-34) provides summary forecasts of aircraft activity at combined tower facilities. Table I-9 (page I-35) gives summary forecasts of activity at FAA facilities only, including FAA towers, en route centers, and flight service stations. Chapter VII and Tables 36 through 53 in Chapter X give more detailed forecasts and discussion of aircraft activity at FAA and contract facilities.

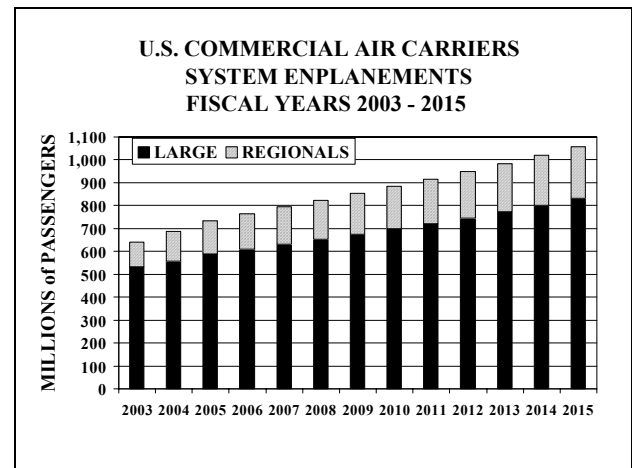
Table I-10 (page I-37) provides summary domestic and international traffic forecasts on a calendar year for large air carriers, regionals/commuters, and air cargo carriers, as well as IFR aircraft handled.

Commercial Aviation

In fiscal 2003, the U.S. commercial aviation industry, consisting of large air carriers and regional/commuter airlines, flew a combined 890.1 billion ASMs. These carriers enplaned 641.4 million passengers who flew 647.8 billion RPMs, achieving a load factor of 72.8 percent. In 2003, the carriers' trip length averaged 1,010.0 miles while their aircraft averaged 136.9 seats.

In 2015, the FAA forecasts that U.S. commercial air carriers will fly a total of over 1.5 trillion ASMs (up 4.6 percent annually) and transport nearly 1.1 billion passengers (up 4.3 percent annually) just over 1.1 trillion passenger miles (up 4.8 percent annually). Load factor is forecast to average 74.5 percent in 2015. The passenger trip length is expected to

increase to 1,072.5 miles (up 5.2 miles annually) while aircraft size increases to 138.6 seats (up 0.1 seats a year).



The combined RPMs of these carriers are expected to return to pre-September 11th levels in 2004 (a year earlier than projected in last year's forecast) while enplanements and ASMs not until 2005 (same as last year's forecast).

Large Air Carriers Domestic Capacity and Traffic

U.S. large air carriers continued to reduce domestic capacity during much of fiscal 2003, with domestic ASMs falling 1.5 percent. At the end of 2003, domestic capacity remained 9.5 percent below 2000 levels. Domestic capacity is forecast to increase 4.6 percent in 2004 and 5.7 percent in 2005, largely in response to an expanding U.S. economy and stronger passenger demand. Thereafter, capacity is expected to increase at an average annual rate of 3.5 percent over the final 10 years of the forecast period. Capacity is expected to return to pre-September 11th levels in 2005.

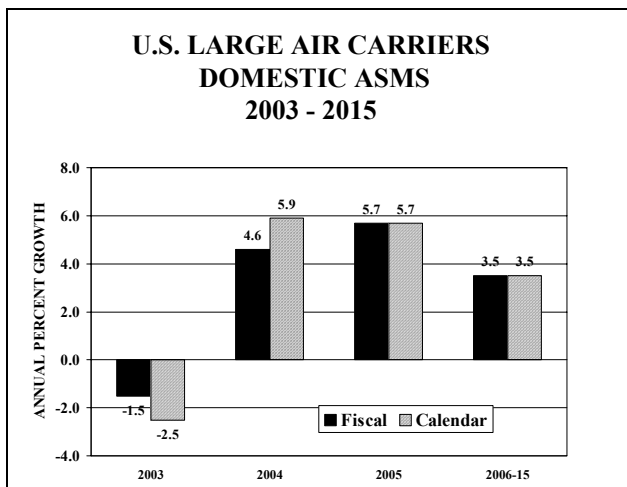
TABLE I-2

AVIATION DEMAND FORECASTS
TOTAL U.S. COMMERCIAL CARRIERS 1/

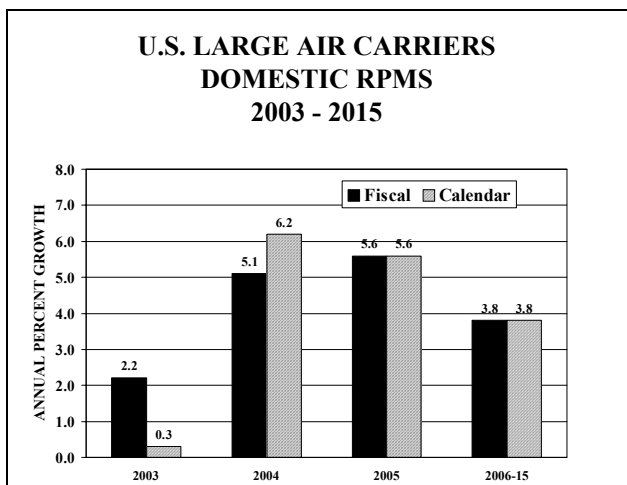
FISCAL YEARS 2004-2015

AVIATION ACTIVITY	HISTORICAL			FORECAST			PERCENT AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
<u>Sum of U.S. Large Air Carriers/ Regionals/Commuters ASMs (Billions)</u>											
Domestic	617.1	681.3	683.2	728.0	778.0	1,126.3	1.3	0.3	6.6	6.9	4.3
International	202.7	212.3	206.8	221.8	241.2	395.2	0.3	(2.6)	7.2	8.7	5.5
Atlantic	85.9	97.0	93.7	101.0	107.9	168.8	1.1	(3.4)	7.8	6.8	5.0
Latin America	39.2	52.1	52.9	58.1	62.3	109.2	3.8	1.6	9.8	7.3	6.2
Pacific	77.6	63.2	60.3	62.7	70.9	117.3	(3.1)	(4.7)	4.1	13.1	5.7
System	819.7	893.6	890.1	949.8	1,019.2	1,521.5	1.0	(0.4)	6.7	7.3	4.6
<u>RPMs (Billions)</u>											
Domestic	399.8	473.0	491.9	525.5	560.1	830.8	2.6	4.0	6.8	6.6	4.5
International	144.6	158.2	155.9	174.0	186.7	303.4	0.9	(1.5)	11.6	7.3	5.7
Atlantic	64.4	74.7	73.2	81.9	87.0	135.1	1.6	(2.0)	11.9	6.2	5.2
Latin America	24.7	34.5	36.5	40.9	43.7	76.2	5.0	5.8	12.0	7.0	6.3
Pacific	55.5	49.0	46.2	51.2	56.0	92.0	(2.3)	(5.7)	10.8	9.5	5.9
System	544.4	631.2	647.8	699.4	746.8	1,134.2	2.2	2.6	8.0	6.8	4.8
<u>Enplanements (Millions)</u>											
Domestic	529.8	574.5	587.3	627.2	668.5	958.4	1.3	2.2	6.8	6.6	4.2
International	49.7	51.2	54.1	59.5	63.3	99.1	1.1	5.8	10.0	6.3	5.2
Atlantic	16.2	18.0	17.8	19.6	20.8	31.7	1.2	(1.1)	9.9	6.3	4.9
Latin America	19.1	23.5	25.8	28.5	30.0	47.3	3.8	10.0	10.4	5.2	5.2
Pacific	14.3	9.6	10.5	11.4	12.5	20.1	(3.8)	8.6	9.1	9.1	5.6
System	579.5	625.7	641.4	686.7	731.8	1,057.6	1.3	2.5	7.1	6.6	4.3

Source: 1995-2003 U.S. Air Carriers, Form 41, U. S. Department of Transportation
1/ Sum of U.S. Large Air Carriers and Regionals/Commuters



Domestic air carrier RPMs and passenger enplanements are forecast to increase at average annual rates of 4.0 and 3.6 percent, respectively, over the 12-year forecast period. Domestic RPMs are forecast to increase by 5.1 percent in 2004, 5.6 percent in 2005, and to average 3.8 percent growth over the remaining 10 years of the forecast period. Domestic enplanements are projected to increase by 4.2 percent in 2004, 5.3 percent in 2005, and 3.4 percent annually between 2006 and 2015. Much of the growth forecast over the 12-year forecast period is expected to come from the low-cost carriers. Similar to last year's forecast, domestic RPMs are projected to return to pre-September 11th levels in 2005; enplanements not until 2007.



The domestic load factor for the large carriers increased to 72.7 percent in 2003 (up 2.6 percentage points), an all-time high. Load

factor is expected to average 73.0 percent in both 2004 and 2005, and then increase slowly over the remainder of the forecast period, reaching a high of 74.8 percent in 2015.

Domestic passenger yield, which declined 0.5 percent (down 2.9 percent in real terms) in 2003, is forecast to hold constant in 2004, then increase by 3.8 percent in 2005. Passenger yield is forecast to increase at an annual rate of 1.2 percent over the remaining 10 years of the forecast period. In real terms, yields are projected to decline by 1.5 percent in 2004, increase by 2.3 percent in 2005, and then decline an average 1.2 percent over the remainder of the forecast period. Nominal domestic yields are not expected to return to pre-September 11th levels during the 12-year forecast period.

The decline in real yields over the latter years of the forecast is based on the assumption that competitive pressures from low-cost carriers will continue to exert pressure on carriers to hold the line on fare increases. Competition in domestic markets will come from established low-fare carriers such as Southwest, as well as smaller low-cost carriers such as AirTran, Frontier, and JetBlue. In addition, low-cost subsidiaries of the network carriers--Delta's Song and United's Ted--can also be expected to exert downward pressure on fares and yields.

Large air carrier aircraft operations, which declined by 13.1 percent over the past 2 years, are forecast to increase 2.2 percent in 2004 and 4.4 percent in 2005. Thereafter, large air carriers operations grow at an average annual rate of 2.7 percent over the remaining 10 years of the forecast period. Large air carrier operations are not expected to return to pre-September 11th activity levels until 2009.

The slower growth in air carrier activity at FAA air traffic facilities relative to expected traffic growth (2.8 versus 3.6 percent growth in domestic enplanements) reflects increased

efficiencies in three operational measures—aircraft size, load factor, and trip length.

The average domestic aircraft size is forecast to increase by 0.5 seats annually, from 148.5 seats in 2003 to 154.0 seats in 2015. Domestic load factors are expected to increase from 72.7 percent in 2003 to 74.8 percent in 2015.

The domestic passenger trip length is up 53.6 miles over the past 2 years, due largely to continued air carrier restructuring and the transfer of shorter distance routes to their regional affiliates. As demand recovers, the larger carriers are expected to resume operation of some of these medium-haul routes. However, the average domestic passenger trip length is forecast to increase by 3.8 miles a year, reaching 984.4 miles in 2015.

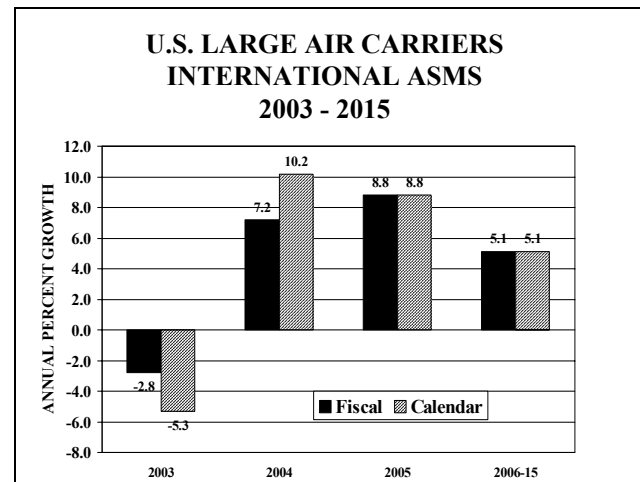
Large Air Carriers International Capacity and Traffic

FAA provides forecasts of total international passenger demand (sum of U.S. and foreign flag carriers) for travel between the United States and three world travel areas--Atlantic, Latin America (including Mexico and the Caribbean), and Asia/Pacific--as well as for U.S./Canadian transborder traffic. These forecasts are based on historical passenger statistics obtained from the United States Immigration and Naturalization Services (INS) and Transport Canada and on regional world historical data and economic projections obtained from Global Insight.

Total passenger traffic between the United States and the rest of the world is estimated to total 116.9 million in 2003, down 16.9 percent from its peak in 2000. Passenger traffic is expected to increase 9.5 percent in 2004, 7.7 percent in 2005, and to average 4.4 percent over the rest of the 10-year forecast period, reaching 212.5 million in 2015. Total traffic between the U.S. and the rest of the world is expected to return to pre-September 11th levels in 2006.

Over the entire forecast period, passenger demand is expected to be strongest in Latin American and Pacific markets, with both regions growing at an annual rate of 5.7 percent. Passenger traffic is projected to grow 5.0 percent annually in Atlantic markets and 3.3 percent a year in Canadian transborder markets.

At the end of 2003, U.S. air carrier international capacity remained 13.9 percent below pre-September 11th levels. International capacity is forecast to increase 7.2 percent in 2004 and 8.8 percent in 2005. Thereafter, capacity increases 5.1 percent annually over the last 10 years of the forecast period. The relatively strong growth in 2004 and 2005 largely reflects recovering passenger traffic demand from the impacts resulting from the September 11th terrorist attacks, the war in Iraq, and SARS.



U.S. carriers international RPMs declined 1.6 percent in 2003 while enplanements were up 4.4 percent. International RPMs are forecast to increase 11.6 percent in 2004, 7.4 percent in 2005, and 5.0 percent annually over the remainder of the forecast period. Enplanements are projected to grow 10.0 percent in 2004, 6.5 percent in 2005, and 4.6 percent annually over the final 10 years of the forecast period, reaching 93.0 million in 2015. U.S. carrier international RPMs are expected to exceed pre-September 11th levels in 2005; enplanements in 2004.

TABLE I-3

AVIATION DEMAND FORECASTS LARGE AIR CARRIERS--PASSENGERS

FISCAL YEARS 2004-2015

AVIATION ACTIVITY	HISTORICAL			FORECAST			PERCENT AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
<u>U. S./Foreign Flag Carriers 1/</u>											
<u>Total Passengers to/from</u>											
<u>United States (Millions)</u>	104.8	120.8	116.9	127.9	137.7	212.5	1.4	(3.2)	9.5	7.7	5.1
Atlantic	37.0	43.4	43.2	47.1	51.1	77.5	1.9	(0.5)	9.0	8.5	5.0
Latin America	32.1	36.9	36.9	41.1	44.0	71.6	1.7	0.1	11.5	7.1	5.7
Pacific	20.8	22.3	19.5	21.7	23.5	37.8	(0.8)	(12.3)	11.0	8.7	5.7
Canadian Transborder	14.8	18.3	17.3	18.0	19.1	25.5	1.9	(5.4)	4.5	5.8	3.3
<u>U.S. Air Carriers</u>											
<u>Enplanements (Millions)</u>											
Domestic	474.3	485.9	482.2	502.4	529.0	738.4	0.2	(0.8)	4.2	5.3	3.6
International	47.6	48.3	50.5	55.6	59.2	93.0	0.7	4.6	10.0	6.5	5.2
Atlantic	16.2	18.0	17.8	19.6	20.8	31.7	1.2	(1.1)	9.9	6.3	4.9
Latin America	17.1	20.7	22.2	24.6	25.9	41.2	3.4	7.6	10.5	5.4	5.3
Pacific	14.3	9.6	10.5	11.4	12.5	20.1	(3.8)	8.6	9.1	9.1	5.6
System	522.0	534.2	532.7	558.0	588.2	831.4	0.3	(0.3)	4.8	5.4	3.8
<u>RPMs (Billions)</u>											
Domestic	387.8	443.2	452.8	475.9	502.6	726.9	2.0	2.2	5.1	5.6	4.0
International	144.2	157.3	154.7	172.6	185.3	301.0	0.9	(1.6)	11.6	7.4	5.7
Atlantic	64.4	74.7	73.2	81.9	87.0	135.1	1.6	(2.0)	11.9	6.2	5.2
Latin America	24.3	33.6	35.4	39.5	42.3	73.9	4.8	5.3	11.8	7.0	6.3
Pacific	55.5	49.0	46.2	51.2	56.0	92.0	(2.3)	(5.7)	10.8	9.5	5.9
System	532.0	600.5	607.5	648.5	687.9	1,027.8	1.7	1.2	6.7	6.1	4.5
<u>Fleet (Large Jets Only) 1/</u>											
Passenger	3,897	4,210	4,090	4,125	4,249	5,732	0.6	(2.9)	0.9	3.0	2.9
<u>Hours Flown (Millions)* 1/</u>											
	12.0	13.0	12.6	13.2	13.8	19.0	0.6	(2.7)	4.3	4.5	3.5

Source: 1995-2003; U.S. Air Carriers, Form 41, U. S. Department of Transportation; Total Passengers, INS Form I-92, U.S. Department of Commerce
2004-2015; FAA Forecasts

1/ Historical and forecast on a calendar year basis

* Includes both passenger (excluding regional jets) and cargo aircraft.

TABLE I-4

AVIATION FORECAST ASSUMPTIONS LARGE AIR CARRIERS--PASSENGERS

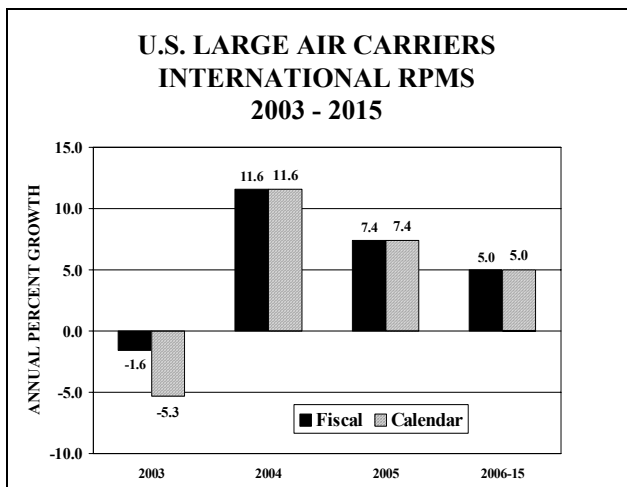
FISCAL YEARS 2004-2015

AVIATION ACTIVITY	HISTORICAL			FORECAST			PERCENT/POINT* AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
<u>Large Air Carriers</u>											
<u>Passenger Yields (Cents/RPM)</u>											
(In Current Dollars)											
Domestic	13.04	11.88	11.82	11.82	12.27	13.78	(1.2)	(0.5)	0.0	3.8	1.3
International	11.14	9.78	9.84	9.96	10.02	11.90	(1.5)	0.6	1.2	0.6	1.6
Atlantic	9.88	9.29	9.53	9.53	9.57	11.43	(0.4)	2.6	0.0	0.4	1.5
Latin America	13.56	12.49	12.34	12.28	12.40	14.88	(1.2)	(1.2)	(0.5)	1.0	1.6
Pacific	11.55	8.67	8.42	8.84	8.92	10.19	(3.9)	(2.9)	5.0	0.9	1.6
<u>Average Aircraft Size (Seats)</u>											
Domestic	149.9	148.0	148.5	148.5	149.0	154.0	(0.2)	0.5	0.0	0.5	0.5
International	249.2	228.5	224.6	223.6	225.3	229.3	(3.1)	(3.9)	(1.0)	1.7	0.4
Atlantic	238.2	233.8	231.2	233.7	235.2	240.7	(0.9)	(2.6)	2.5	1.5	0.8
Latin America	184.3	172.3	171.8	170.8	171.3	176.3	(1.6)	(0.5)	(1.0)	0.5	0.4
Pacific	322.0	295.2	286.6	281.6	282.4	287.6	(4.4)	(8.6)	(5.0)	0.8	0.1
<u>Average Trip Length (Miles)</u>											
Domestic	817.6	912.1	939.1	947.2	949.9	984.4	15.2	27.0	8.1	2.7	3.8
International	3,026.1	3,255.2	3,062.9	3,106.4	3,132.1	3,154.8	4.6	(192.3)	43.5	25.7	7.7
Atlantic	3,966.1	4,147.5	4,109.3	4,184.5	4,180.5	4,257.8	17.9	(38.2)	75.2	(4.0)	12.4
Latin America	1,421.2	1,625.8	1,590.8	1,609.5	1,633.5	1,794.7	21.2	(35.0)	18.7	24.0	17.0
Pacific	3,872.4	5,077.6	4,409.1	4,477.8	4,494.2	4,576.9	67.1	(668.5)	68.7	16.4	14.0
<u>Average Load Factor (Percent)</u>											
Domestic	65.4	70.1	72.7	73.0	73.0	74.8	0.9	2.6	0.3	0.0	0.2
International	71.4	74.6	75.5	78.6	77.6	76.9	0.5	0.9	3.1	(1.0)	0.1
Atlantic	75.0	77.0	78.1	81.1	80.6	80.0	0.4	1.1	3.0	(0.5)	0.2
Latin America	63.1	66.5	69.3	70.8	70.5	70.0	0.8	2.8	1.5	(0.3)	0.1
Pacific	71.5	77.5	76.6	81.6	79.0	78.5	0.6	(0.9)	5.0	(2.6)	0.2

Source: 1995-2003; U.S. Air Carriers, Form 41, U. S. Department of Transportation.

2004-2015; FAA Forecasts

* Passenger Yield, annual percent change; all other series, annual absolute change.



The faster growth in U.S. carrier international traffic compared to total international traffic over the 12-year forecast period (5.2 versus 4.4 percent) reflects gains in market share from foreign flag carriers. However, despite these gains, U.S. carriers will also continue to shift flying to foreign flag code-share and alliance partners. These shifts enable U.S. carriers to continue to promote and sell travel to foreign travel destinations without incurring the costs of actually operating aircraft on these routes.

The forecasts of international demand assume that U.S. air carriers will benefit from the strong economic recovery expected to start in 2004 in both the United States and world markets. International air carrier RPMs and passenger enplanements are forecast to increase at annual rates of 5.7 and 5.2 percent, respectively, over the 12-year forecast period. The stronger growth in international travel relative to domestic markets is being driven by the strong passenger demand projected in the Latin American and Asia/Pacific markets--passengers up 5.3 and 5.6 percent, respectively.

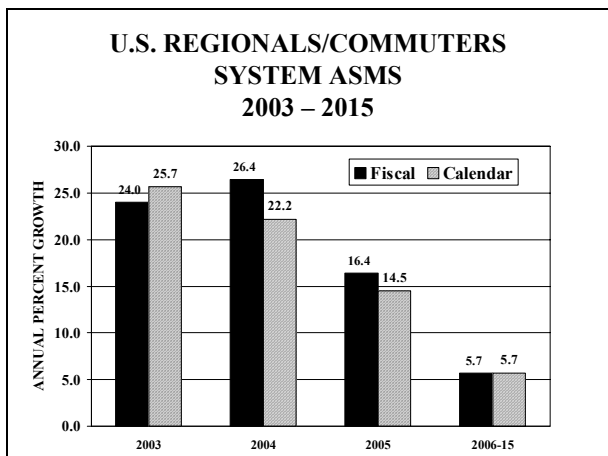
International load factors are forecast to increase from 75.5 percent in 2003 to 78.6 percent in 2004 and then decline gradually over the over the next 3 years, reaching 77.0 percent in 2007. Load factors are expected to fluctuate around this level throughout the remainder of the forecast period, averaging 76.9 percent in 2015.

International passenger yields were up 0.6 percent in 2003, due in large part to stronger traffic demand in the higher priced Latin American markets. International yields are expected to increase by 1.2 percent in 2004, reflecting strong passenger demand in all three world travel regions. International passenger yields are expected to increase 1.6 percent annually over the entire forecast period. In real terms, international yields decline at an annual rate of 0.6 percent over the forecast period. The decline in real yields is based on the assumption that competitive pressures will continue to exert pressure on carriers to hold the line on fare increases. In international markets, this takes the form of expanded open sky agreements and new and existing global alliances.

Regionals/Commuters Capacity and Passenger Traffic

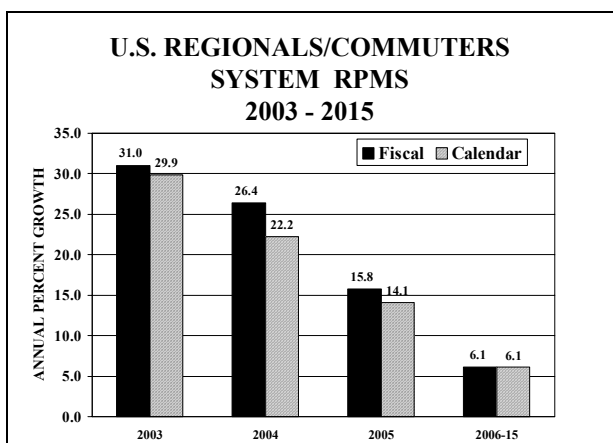
Regionals/commuters ASMs are up 54.4 percent since 2000, 54.8 percent in domestic markets and 41.4 percent in international (largely the Caribbean and Mexico) markets. These large increases are due, in part, to the restructuring among the large network carriers and the transfer of large numbers of routes to their smaller code-share partners. Of course, these route transfers would not have been possible without the addition of 751 regional jets to the fleet over this 3-year period.

Regional/commuter capacity is forecast to increase an additional 26.4 in 2004 and 16.4 percent in 2005, the large increases due to the projected delivery of an additional 549 regional jets over this 2-year period. Growth in capacity is expected to slow to 5.7 percent annually over the remainder of the forecast period and to average 8.1 percent over the 12-year forecast period.



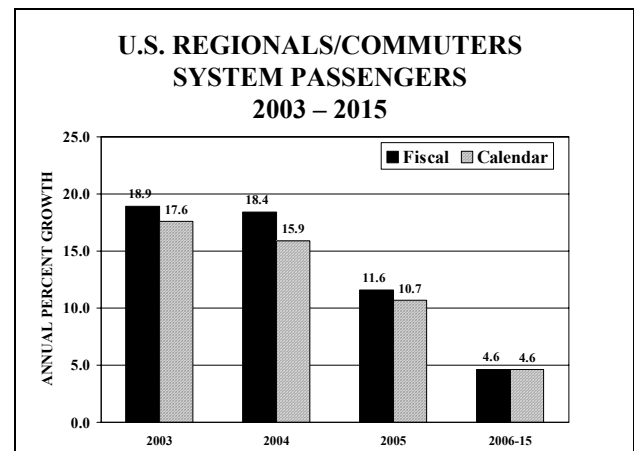
Regional/commuter RPMs are up 70.3 percent since 2000, up 71.4 percent in domestic markets and 37.7 percent in international markets. RPMs are projected to increase 26.4 percent in 2004, 15.8 percent in 2005, and to average 6.1 percent over the remaining 10 years of the forecast period.

Regional/commuter carriers achieved a load factor of 64.7 percent in 2003, up 3.4 percentage points over the previous year. Load factors are projected to remain constant in 2004 and decline slightly in 2005. Thereafter, load factors are forecast to increase gradually and reach 67.1 percent in 2015.



Passenger growth is expected to be less than that forecast for RPMs, growing by 18.4 percent in 2004 and 11.6 percent in 2005. Over the 12-year forecast period, regional/commuter passengers are forecast to increase an average of 6.3 percent a year, from 108.7 million in 2003 to 226.2 million in 2015. In 2015,

regionals/commuters are expected to transport 21.4 percent of all passengers in scheduled commercial air service, up from 16.9 percent in 2003.



Despite the relatively large increases in capacity over the past 3 years, regional/commuter aircraft operations at FAA air traffic facilities are up only 6.2 percent over the same period. The significantly slower growth relative to ASMs is largely the result of the increase in the passenger trip length of 84.7 miles over the 3-year period—from 285.5 to 370.2 miles. This longer trip length is also reflected in the number of regional/commuter aircraft handled at en route centers—up 13.0 percent over the same 3-year period. This increase at en route centers is due, in large part, to a 59.6 percent increase in the number of overflights, that is, flights that traverse one or more en route centers.

Regional/commuter activity is expected to increase rapidly over the next several years, averaging 5.5 percent over the next 2 years. Thereafter, regional/commuter operations are forecast to grow at an average annual rate of 2.3 percent over the rest of the forecast period. Slower growth in activity at FAA air traffic facilities relative to ASMs (2.8 versus 8.1 percent) and passengers compared to and RPMs (6.3 versus 8.4 percent) results from higher load factors, longer trip lengths, and larger aircraft.

TABLE I-5

AVIATION DEMAND FORECASTS AND ASSUMPTIONS REGIONALS/COMMUTERS

FISCAL YEARS 2004-2015

AVIATION ACTIVITY	HISTORICAL			FORECAST			PERCENT/POINT* AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
REGIONAL/COMMUTERS											
<u>Enplanements (Millions)</u>											
Domestic	55.4	88.6	105.1	124.7	139.5	220.1	8.3	18.6	18.7	11.8	6.4
International	2.1	2.8	3.6	4.0	4.1	6.1	7.3	26.9	9.8	3.9	4.5
System	57.5	91.5	108.7	128.7	143.6	226.2	8.3	18.9	18.4	11.6	6.3
<u>RPMs (Billions)</u>											
Domestic	12.0	29.8	39.1	49.6	57.5	104.0	16.0	31.3	26.7	16.0	8.5
International	0.4	0.9	1.1	1.3	1.4	2.4	13.8	23.1	18.4	5.5	6.5
System	12.4	30.7	40.2	50.9	58.9	106.4	15.9	31.0	26.4	15.8	8.4
<u>Fleet (As of December 31) 1/</u>											
Turboprops/Pistons	2,031	1,461	1,351	1,287	1,242	1,081	(5.0)	(7.5)	(4.7)	(3.5)	(1.8)
Jets	78	1,035	1,321	1,598	1,870	3,222	42.4	27.6	21.0	17.0	7.7
Total	2,109	2,496	2,672	2,885	3,112	4,303	3.0	7.1	8.0	7.9	4.1
<u>Block to Block Hours (000) 1/</u>	4,659	5,558	5,872	6,351	6,862	10,241	2.9	5.6	8.2	8.0	4.7
<u>Average Aircraft Size (Seats)</u>											
Domestic	31.0	42.8	44.7	47.2	48.8	53.7	1.7	1.9	2.5	1.6	0.8
International	28.4	41.0	43.2	43.7	44.2	49.2	1.9	2.2	0.5	0.5	0.5
System	31.0	42.8	44.7	47.1	48.7	53.6	1.7	1.9	2.4	1.6	0.7
<u>Average Trip Length (Miles)</u>											
Domestic	216.0	336.3	372.3	397.3	412.3	472.4	19.5	36.0	25.0	15.0	8.3
International	193.4	320.4	310.8	335.0	340.0	390.0	14.7	(9.6)	24.2	5.0	6.6
System	215.2	335.8	370.2	395.4	410.2	470.2	19.4	34.4	25.2	14.8	8.3
<u>Average Load Factor (Percent)</u>											
Domestic	49.2	61.3	64.9	64.9	64.5	67.1	2.0	3.6	0.0	(0.4)	0.2
International	59.2	61.1	59.3	60.0	60.5	65.5	0.0	(1.8)	0.7	0.5	0.5
System	49.4	61.3	64.7	64.7	64.4	67.1	1.9	3.4	0.0	(0.3)	0.2

Source: Regionals/Commuters; 1995-2003, Forms 298-C and 41, U.S. Department of Transportation; 2004-2015, FAA Forecasts

1/ Historical and forecast data on a calendar year basis

* Enplanements, RPMs, Fleet, and Hours Flown: annual percent change; all other series, annual absolute change.

Over the 12-year forecast, the average passenger trip length is forecast to increase from 370.2 miles in 2003 to 470.2 miles in 2015. However, much of the growth occurs during the first 3 years of the forecast period--up an average 16.6 miles a year. The relative large increases during this period result from two factors--the integration of large numbers of regional aircraft into the regional/commuter fleet and the expected continuation of medium- to long-haul route transfers from their larger code-share partners. Thereafter, the passenger trip length increases by almost 5.6 miles annually over the remainder of the forecast period.

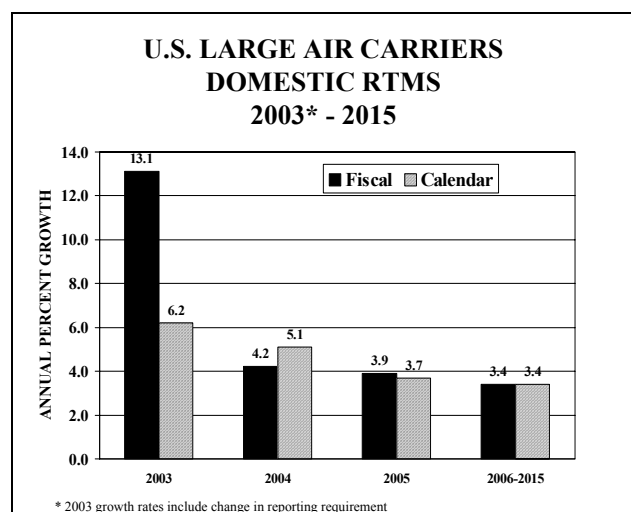
Greater use of the larger regional jets also results in the average seating capacity of the regional fleet increasing from 44.7 seats in 2003 to 53.6 seats in 2015.

Air Cargo

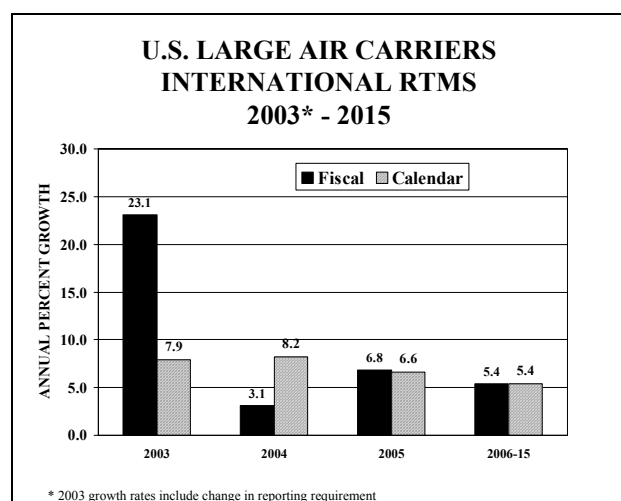
Total air cargo traffic is projected to increase at rates similar to those for passenger traffic, although the domestic and international entities both grow slower than those for passengers.¹⁴ System RTMs and RPMs both increase at average annual rates of 4.5 percent over the 12-year forecast period. Domestic RTMs are forecast to increase 3.5 percent annually (versus 4.0 percent for domestic RPMs) while international RTMs are projected to increase 5.3 percent a year (versus 5.7 percent for international RPMs).

Domestic RTMs are forecast to increase 4.2 percent in 2004, 3.9 percent in 2005, and to average 3.4 percent over the final 10 years of the forecast period. Most of the growth in the demand for domestic cargo services is forecast to occur among all-cargo carriers due to their larger share and the advantages of the integrated carriers. All-cargo carrier domestic RTMs are projected to increase 3.9 percent a year over the entire forecast period, compared with growth of

only 2.0 percent annually for passenger carriers. All-cargo carriers' share of domestic RTMs is forecast to increase from 74.8 percent in 2003 to 78.7 percent in 2015.



International RTMs are forecast to increase 3.1 percent in 2004 and 6.8 percent in 2005. After that, international cargo traffic is forecast to increase 5.4 percent a year over the rest of the forecast period. All-cargo and passenger carrier international RTMs are projected to increase at annual rates of 5.8 and 4.5 percent, respectively, over the 12-year forecast period. All-cargo carriers' share of international RTMs is projected to increase from 62.6 percent in 2003 to 66.0 percent in 2015.



¹⁴ This is due to differences in the relative weights for the domestic and international components of cargo and passenger traffic.

TABLE I-6

AVIATION DEMAND FORECASTS LARGE AIR CARRIERS--AIR CARGO

FISCAL YEARS 2004-2015

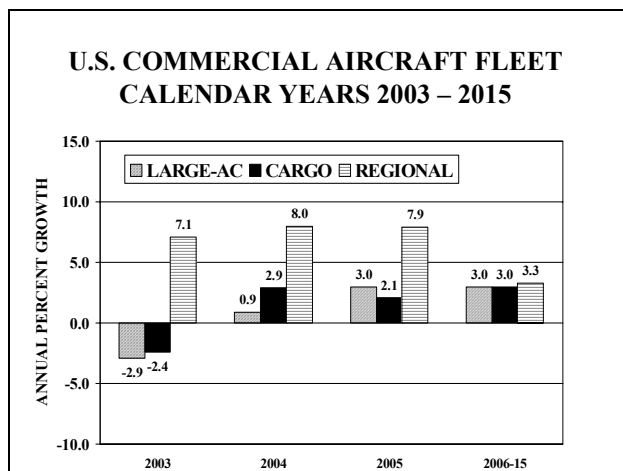
AVIATION ACTIVITY	HISTORICAL			FORECAST			PERCENT AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
<u>Total Cargo RTMs (Millions)</u>											
Domestic	12,416	12,967	14,670	15,293	15,894	22,155	2.1	13.1	4.2	3.9	3.5
International	10,812	14,796	18,217	18,783	20,069	33,872	6.7	23.1	3.1	6.8	5.3
System	23,228	27,763	32,887	34,076	35,963	56,026	4.4	18.5	3.6	5.5	4.5
<u>Total RTMs--Passenger Airlines</u>											
Domestic	4,661	3,337	3,704	3,811	3,909	4,719	(2.8)	11.0	2.9	2.6	2.0
International	5,479	6,594	6,809	6,968	7,389	11,516	2.8	3.3	2.3	6.0	4.5
System	10,140	9,931	10,514	10,779	11,298	16,235	0.5	5.9	2.5	4.8	3.7
<u>% RTMs--Passenger Airlines</u>											
Domestic	37.5	25.7	25.2	24.9	24.6	21.3					
International	50.7	44.6	37.4	37.1	36.8	34.0					
System	43.7	35.8	32.0	31.6	31.4	29.0					
<u>Total RTMs--All-Cargo Airlines</u>											
Domestic	7,754	9,630	10,966	11,482	11,985	17,436	4.4	13.9	4.7	4.4	3.9
International	5,333	8,202	11,407	11,815	12,681	22,355	10.0	39.1	3.6	7.3	5.8
System	13,087	17,832	22,373	23,297	24,666	39,791	6.9	25.5	4.1	5.9	4.9
<u>% RTMs--All-Cargo Airlines</u>											
Domestic	62.5	74.3	74.8	75.1	75.4	78.7					
International	49.3	55.4	62.6	62.9	63.2	66.0					
System	56.3	64.2	68.0	68.4	68.6	71.0					
<u>Cargo Aircraft 1/</u>	824	965	942	969	989	1,332	1.7	(2.4)	2.9	2.1	2.9

Source: 1995-2003; U.S. Air Carriers, Form 41, U. S. Department of Transportation.
2004-2015; FAA Forecasts

1/ Historical and forecast data on a calendar year basis

Commercial Aircraft

The number of commercial aircraft is forecast to grow from 7,704 in 2003 to 11,367 in 2015, an average annual growth rate of 3.3 percent or just over 305 aircraft annually. The commercial fleet grows by 275 aircraft in 2004 and 371 aircraft in 2005; however, most of the growth occurs among regional/commuters.



The number of large passenger jets (over 70 seats) declined by 120 aircraft in 2003 but are expected to increase by 35 aircraft in 2004 and an additional 124 aircraft in 2005. Over the remaining 10 years of the forecast period, the large air carrier passenger fleet increases by an average of 148 aircraft a year, reaching a total of 5,732 aircraft in 2015. The narrowbody fleet (including regional jets ordered by JetBlue) is projected to grow by 125 aircraft annually over the 12-year forecast period, the widebody fleet by less than 12 aircraft a year.

The regional/commuter passenger fleet is forecast to increase by 594 aircraft over the next 3 years--213 in 2004, 227 in 2005, and 154 in 2006. Thereafter, the regional/commuter fleet is expected to increase by an average of 115 aircraft (3.1 percent) over the remaining 9 years of the forecast period, reaching a total of 4,303 aircraft in 2015. The number of regional jets (up to 70 seats) in regional/commuter service is projected to grow from 1,321 in 2003

to 3,222 in 2015, an average annual increase of 7.7 percent. However, the turboprop/piston fleet is expected to decline from 1,351 in 2003 to 1,081 in 2009 and to remain at this level throughout the remainder of the forecast period. Turboprop/piston aircraft are expected to account for only 25.1 percent of the regional fleet in 2015, down from a 50.6 percent share in 2003.

Cargo large jet aircraft are forecast to increase to 969 aircraft in 2004, to 989 aircraft in 2005, and 1,332 aircraft in 2015. The narrowbody jet fleet is projected to decline by 4 aircraft over the 12-year forecast period. The widebody jet fleet is projected to increase by almost 33 aircraft yearly.

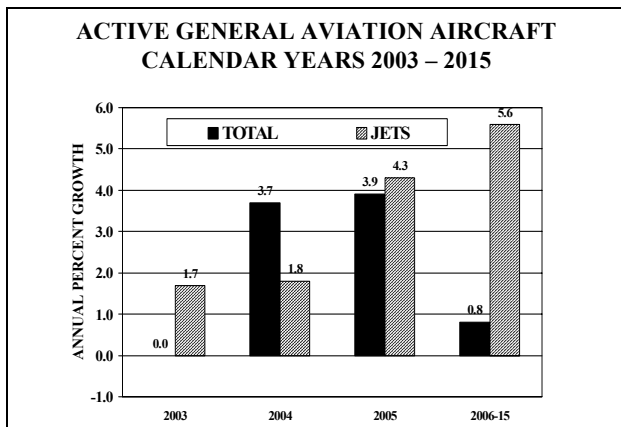
General Aviation

Despite the slowdown in the demand for business jets, the current forecast assumes that business use of general aviation aircraft will expand at a more rapid pace than that for personal/sport use. The business/corporate side of general aviation should continue to benefit from safety concerns for its corporate staff. These safety concerns, combined with increased processing times at some U.S. airports have made fractional, corporate, and on-demand charter flights viable alternatives to travel on commercial flights. In addition, the bonus depreciation provision of the President's economic stimulus package should also help stimulate business jet sales, especially during the latter months of 2004.

The active general aviation fleet is projected to increase at an average annual rate of 1.3 percent over the 12-year forecast period, growing from an estimated 211,190 in 2003 to 246,415 aircraft in 2015. The more expensive and sophisticated turbine-powered fleet (including rotorcraft) is projected to grow at an average annual rate of 3.1 percent over the 12-year forecast period. However, the jet fleet is responsible for most of

this growth, increasing from 8,500 in 2003 to 15,510 in 2015, an average annual increase of 5.1 percent.

At the September 2002 TRB/FAA workshop, the Business Aviation Panel suggested that the market for the new Eclipse jet aircraft could add an additional 5,000 aircraft to the active fleet by 2010. The Eclipse, a relatively inexpensive (priced at under \$1 million) twin-engine business aircraft, is believed to have the potential to redefine the business jet segment by expanding business jet flying and offering performance that may support a true on-demand air-taxi business service. This year's forecast assumes that the Eclipse (or a similar type aircraft) will enter the active fleet in 2006 (100 aircraft) and grow by between 400 to 500 aircraft a year, reaching a total of 4,600 by 2015.



The numbers of piston-powered aircraft (including rotorcraft) are projected to increase from 163,250 in 2003 to 167,640 in 2015, an average increase of only 0.2 percent annually. This slow growth is due to declining numbers of multi-engine aircraft and the attrition of approximately 1,500 single engine aircraft annually. Single engine pistons and piston rotorcraft increase at annual rates of 0.3 and 1.0 percent, respectively, during the 12-year forecast period.

Starting in 2004, owners of ultralight aircraft (not currently included in the FAA's aircraft registry counts) can begin registering these

aircraft as "light sport" aircraft. The forecast assumes registration of 15,535 aircraft over a 2-year period beginning in 2004. In addition, it is projected that approximately 300-500 newly manufactured light sport aircraft will enter the active fleet on an annual basis beginning in 2006. This new aircraft category is expected to total 20,915 by 2015.

Excluding the new sport aircraft, the number of general aviation hours flown is projected to increase by just only 0.4 percent in 2004, largely the result of the lingering effects of the slowdown in the demand for business jets and fractional flying. However, hours flown are expected to increase 1.6 percent a year over the last 11 years of the forecast period. Much of the increase over this latter period reflects increased flying by business and corporate aircraft as well as increased utilization rates on most general aviation aircraft.

Hours flown by turbine aircraft (including rotorcraft) increase an average of 3.8 percent yearly over the forecast period, compared with only 0.6 percent for piston-powered aircraft. Jet aircraft account for a large part of the increase, expanding at an average annual rate of 6.6 percent. The large increases in jet hours are due to expected increases in the fractional ownership fleet and its activity levels. Fractional ownership aircraft average approximately 1,200 hours annually compared to only 360 hours for all business jets. In addition, the introduction of the Eclipse (or similar type aircraft) may result in an increase in the activity and hours flown by on-demand air taxis.

TABLE I-7

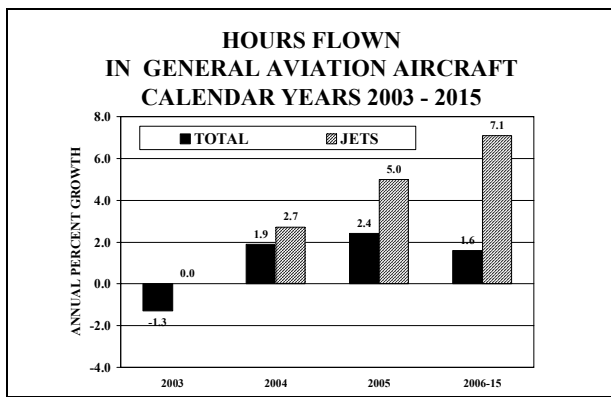
AVIATION DEMAND FORECASTS AND ASSUMPTIONS GENERAL AVIATION

CALENDAR YEARS 2004-2015

AVIATION ACTIVITY		HISTORICAL			FORECAST		PERCENT AVERAGE ANNUAL GROWTH					
		1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
GENERAL AVIATION												
Total Active Fleet(000)		188.1	211.2	211.2	219.1	227.6	246.4	1.5	(0.0)	3.7	3.9	1.3
Total less Sport Aircraft (000)		188.1	211.2	211.2	211.4	212.1	225.5	1.5	(0.0)	0.1	0.3	0.5
Pistons		152.8	161.1	160.9	160.8	160.8	164.9	0.6	(0.1)	(0.0)	0.0	0.2
Single Engine		137.0	143.5	143.4	143.4	143.5	148.5	0.6	(0.1)	0.0	0.1	0.3
Multi-Engine		15.7	17.6	17.5	17.4	17.3	16.5	1.3	(0.5)	(0.5)	(0.5)	(0.5)
Turbine		9.6	15.2	15.4	15.6	16.0	23.6	6.1	1.1	1.2	3.0	3.7
Turboprops		5.0	6.8	6.9	6.9	7.0	8.1	4.0	0.3	0.6	1.4	1.4
Turbojets		4.6	8.4	8.5	8.7	9.0	15.5	8.1	1.7	1.8	4.3	5.1
Rotorcraft		5.8	6.6	6.7	6.7	6.7	7.2	1.7	0.0	0.5	0.6	0.7
Experimental		15.2	21.9	22.0	22.0	22.1	23.1	4.7	0.1	0.2	0.2	0.4
Sport Aircraft		NA	NA	NA	7.7	15.5	20.9	NA	NA	NA	101.8	NA
Other		4.7	6.4	6.4	6.4	6.4	6.6	3.8	0.0	0.3	0.3	0.3
Total Hours Flown(Mil)		26.6	27.0	26.7	27.2	27.9	32.7	0.0	(1.3)	1.9	2.4	1.7
Total less Sport Aircraft (Mil)		26.6	27.0	26.7	26.8	27.1	31.7	0.0	(1.3)	0.4	1.0	1.4
Pistons		20.3	18.9	18.6	18.6	18.7	20.0	(1.1)	(1.5)	0.1	0.5	0.6
Single Engine		17.8	16.3	16.1	16.1	16.2	17.5	(1.3)	(1.6)	0.2	0.6	0.7
Multi-Engine		2.4	2.6	2.5	2.5	2.5	2.4	0.6	(1.0)	(0.4)	(0.4)	(0.4)
Turbine		2.9	4.6	4.6	4.7	4.8	7.8	5.7	(0.4)	1.6	3.2	4.6
Turboprops		1.5	1.9	1.8	1.8	1.8	1.9	2.6	(1.1)	0.0	0.5	0.5
Turbojets		1.5	2.7	2.7	2.8	3.0	5.9	8.3	0.0	2.7	5.0	6.6
Rotorcraft		2.0	1.9	1.8	1.9	1.9	2.1	(0.8)	(1.7)	1.1	0.8	1.1
Experimental		1.2	1.3	1.3	1.3	1.4	1.5	1.5	0.0	0.0	0.4	0.6
Sport Aircraft		NA	NA	NA	0.4	0.8	1.1	NA	NA	NA	101.8	NA
Other		0.3	0.3	0.3	0.3	0.3	0.3	3.0	(0.9)	1.5	0.0	0.4
Total Aircraft Utilization(Hrs)		141.5	128.0	126.4	124.1	122.4	132.9	(1.4)	(1.3)	(1.8)	(1.4)	0.4
Total less Sport Aircraft (Hrs)		141.5	128.0	126.4	126.8	127.7	140.5	(1.4)	(1.3)	0.3	0.7	0.9
Pistons		132.5	117.3	115.6	115.8	116.3	121.0	(1.7)	(1.4)	0.2	0.4	0.4
Turbine		308.2	302.4	297.9	299.0	299.6	330.7	(0.4)	(1.5)	0.4	0.2	0.9
Rotorcraft		336.4	282.2	277.4	279.2	279.8	292.0	(2.4)	(1.7)	0.6	0.2	0.4
Total Active Pilots (000)		639.2	632.8	625.0	638.9	654.4	755.5	(0.3)	(1.2)	2.2	2.4	1.6
Total less Sport Pilots (000)		639.2	632.8	625.0	630.8	638.3	734.7	(0.3)	(1.2)	0.9	1.2	1.4
Instrument Rated Pilots (000)		298.8	317.4	315.4	318.5	323.3	385.5	0.7	(0.6)	1.0	1.5	1.7

Source: Fleet and Hours: 1995-2002, FAA General Aviation and Air Taxi Activity Survey; 2003-2015, FAA Forecasts

Pilots: 1995-2003, FAA Aeronautical Center; 2004-2015, FAA Forecasts



The number of active general aviation pilots (excluding air transport pilots) is projected to total 581,020 in 2015, an increase of almost 99,500 (up 1.6 percent annually) over the forecast period. A large part of this growth is due to the certification of 20,800 new sport pilots over the forecast period. However, more than half of the expected growth (50,300 pilots) is projected to occur in the private and commercial categories, reflecting the expected increase in the demand for pilots among fractional ownership companies, business corporations, and on-demand charter operations. The number of private pilots is projected to total 267,800 (up 0.8 percent annually) in 2015. Commercial pilots are forecast to increase from 123,700 in 2003 to 149,210 in 2015, an average annual increase of 1.6 percent. More than 21,100 new student pilots are projected to be certificated over the 12-year forecast period. The number of student pilots increase from 87,296 in 2003 to 108,430 in 2015, an average annual rate of 1.8 percent.

FAA Workload Forecasts

There were 484 towered airports at the end of September 2003, 266 FAA towers and 218 contract towers. While the number of FAA towers is expected to remain constant at 266 in 2004, the number of FAA contract towered airports is forecast to increase by 13 to 231. In 2003, aircraft activity at these 13 airports totaled approximately 1.2 million operations, with

general aviation accounting for 96.5 percent of the total activity.

FAA and Contract Towers

Activity at the combined FAA and contract towers totaled 62.7 million operations in 2003, a decline of 3.3 percent from 2002. Activity is expected to increase 3.4 percent in 2004 and 4.3 percent in 2005, largely the result of increases of 4.0 and 4.7 percent, respectively, in commercial activity. Activity at combined FAA/contract towers is projected to increase at an average annual rate of 1.8 percent over the remaining 10 years of the forecast period, reaching 80.5 million operations in 2015. Most of the growth over the 12-year forecast period is due to increased commercial aircraft activity (up 2.8 percent annually). Activity at combined FAA/contract towers is expected to return to pre-September 11th levels in 2006.

General aviation activity is forecast to increase by 3.2 percent in 2004, 4.2 percent in 2005, and 1.3 percent annually over the remainder of the forecast period, reaching 43.4 million operations in 2015. General aviation activity would have increased by only 0.7 percent in 2004 without the addition of the 13 new contract towers.

Military activity, which declined by 1.8 percent in 2003, is expected to increase by 1.5 percent in 2004 and by 2.2 percent 2005. This increase is due to activity at the 13 new contract towers. (These airports are not included in the traffic count for previous years.) Military activity is held constant at the 2005 activity level (3.1 million) throughout the remainder of the forecast period.

Combined instrument operations counts at FAA and contract towered airports (48.2 million) declined by 2.7 percent in 2003. Instrument activity is expected to increase 2.8 percent in 2004 and 2.9 percent in 2005. Thereafter, instrument operations increase at an average annual rate of 2.0 over the remainder of the

TABLE I-8

**AVIATION ACTIVITY FORECASTS
COMBINED FAA AND CONTRACT TOWERS
FISCAL YEARS 2004-2015**

ACTIVITY MEASURES (In Millions)	HISTORICAL			FORECAST			PERCENT AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
<u>NUMBER OF TOWERS</u>											
FAA Towers	326	266	266	266	266	266					
FAA Contract Towers	95	217	218	231	231	231					
TOTAL	421	483	484	497	497	497					
<u>AIRCRAFT OPERATIONS</u>											
Air Carrier	13.6	13.2	12.8	13.1	13.7	17.9	(0.8)	(2.9)	2.2	4.4	2.8
Commuter/Air Taxi	10.2	11.0	11.4	12.1	12.7	16.0	1.4	3.6	5.9	4.9	2.9
General Aviation	35.9	37.6	35.5	36.6	38.2	43.4	(0.2)	(5.6)	3.2	4.2	1.7
Itinerant GA	20.9	21.4	20.2	20.8	21.6	24.6	(0.4)	(5.6)	3.0	3.8	1.7
Local GA	15.1	16.2	15.3	15.8	16.6	18.8	0.2	(5.6)	3.5	4.8	1.7
Military	2.6	3.1	3.0	3.1	3.1	3.1	1.8	(1.8)	1.5	2.2	0.3
Itinerant MIL	1.3	1.6	1.5	1.6	1.6	1.6	1.7	(1.5)	2.9	4.2	0.6
Local MIL	1.3	1.5	1.5	1.5	1.5	1.5	1.8	(2.2)	0.1	0.0	0.0
TOTAL	62.4	64.9	62.7	64.9	67.7	80.5	0.1	(3.3)	3.4	4.3	2.1
<u>INSTRUMENT OPERATIONS</u>											
Air Carrier	14.7	14.4	14.0	14.3	14.9	19.6	(0.6)	(2.7)	2.2	4.4	2.8
Commuter/Air Taxi	11.0	11.9	12.3	13.0	13.7	17.2	1.5	3.3	5.8	4.7	2.8
General Aviation	18.2	19.7	18.6	19.0	19.2	22.0	0.3	(5.2)	1.7	1.1	1.4
Military	3.6	3.6	3.3	3.3	3.3	3.3	(1.0)	(8.3)	0.0	0.0	0.0
TOTAL	47.4	49.6	48.2	49.6	51.0	62.1	0.2	(2.7)	2.8	2.9	2.1

Source: FY 1995-2015, FAA Data and Forecasts

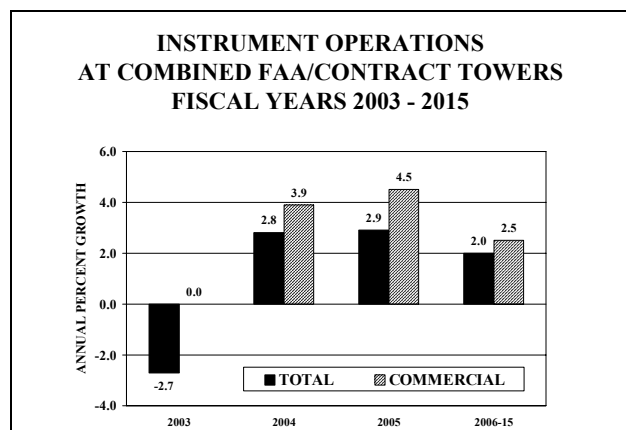
TABLE I-9
AVIATION ACTIVITY FORECASTS
FAA FACILITIES

FISCAL YEARS 2004-2015

ACTIVITY MEASURES (In Millions)	HISTORICAL			FORECAST			PERCENT AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
<u>AIRCRAFT OPERATIONS</u>											
Air Carrier	13.6	13.0	12.6	12.9	13.5	17.7	(0.9)	(3.0)	2.2	4.4	2.8
Commuter/Air Taxi	9.8	9.5	9.9	10.5	11.0	13.8	0.1	4.5	5.8	4.7	2.8
General Aviation	32.3	24.1	22.6	22.7	22.9	26.0	(4.4)	(6.4)	0.7	1.0	1.2
Itinerant GA	18.9	14.6	13.6	13.7	13.8	15.7	(4.1)	(6.8)	0.6	1.0	1.2
Local GA	13.4	9.5	9.0	9.0	9.1	10.4	(4.9)	(5.8)	0.7	0.9	1.2
Military	2.3	2.0	1.9	1.9	1.9	1.9	(2.2)	(4.2)	0.0	0.0	0.0
Itinerant MIL	1.2	1.1	1.1	1.1	1.1	1.1	(1.4)	(3.3)	0.0	0.0	0.0
Local MIL	1.1	0.9	0.9	0.9	0.9	0.9	(3.0)	(5.3)	0.0	0.0	0.0
TOTAL	58.0	48.6	47.0	48.0	49.3	59.4	(2.6)	(3.3)	2.1	2.7	2.0
<u>INSTRUMENT OPERATIONS</u>											
Air Carrier	14.6	14.3	13.9	14.2	14.8	19.4	(0.7)	(2.6)	2.2	4.4	2.8
Commuter/Air Taxi	10.8	11.6	12.0	12.7	13.3	16.7	1.3	3.4	5.8	4.7	2.8
General Aviation	18.1	19.4	18.3	18.7	18.9	21.7	0.2	(5.3)	1.7	1.1	1.4
Military	3.5	3.5	3.2	3.2	3.2	3.2	(1.2)	(8.5)	0.0	0.0	0.0
TOTAL	47.0	48.7	47.4	48.7	50.2	61.0	0.1	(2.7)	2.8	2.9	2.1
<u>IFR AIRCRAFT HANDLED</u>											
Air Carrier	21.0	22.8	22.7	23.4	24.5	32.1	1.0	(0.3)	3.0	4.4	2.9
Commuter/Air Taxi	6.9	8.8	9.1	9.7	10.1	12.8	3.5	3.8	5.8	4.7	2.8
General Aviation	7.8	8.2	8.0	8.2	8.3	9.7	0.3	(2.2)	2.2	1.6	1.6
Military	4.4	3.9	3.9	3.9	3.9	3.9	(1.6)	(1.7)	0.0	0.0	0.0
TOTAL	40.1	43.7	43.7	45.1	46.8	58.4	1.1	0.0	3.2	3.6	2.4
<u>FLIGHT SERVICES</u>											
Pilot Briefs	9.2	7.5	7.0	7.2	7.2	8.1	(3.3)	(6.0)	2.3	0.9	1.2
Flight Plans Originated	6.3	5.8	5.4	5.3	5.3	5.7	(1.9)	(6.2)	(1.5)	(0.8)	0.4
Aircraft Contacted	4.2	3.0	2.8	2.8	2.8	3.2	(5.0)	(5.4)	(1.9)	1.1	1.1
TOTAL	35.2	29.4	27.7	27.8	27.8	30.8	(3.0)	(6.0)	0.4	0.3	0.9
DUATS	11.5	16.5	17.5	18.2	18.8	22.5	5.4	6.0	4.3	2.9	2.1
TOTAL (w/DUATS)	46.7	45.9	45.1	46.0	46.6	53.3	(0.4)	(1.7)	1.9	1.3	1.4

Source: FY 1995-2015, FAA Data and Forecasts

forecast period, totaling 62.1 million operations in 2015. Instrument activity at combined FAA/contract towers is expected to return to pre-September 11th levels in 2007.



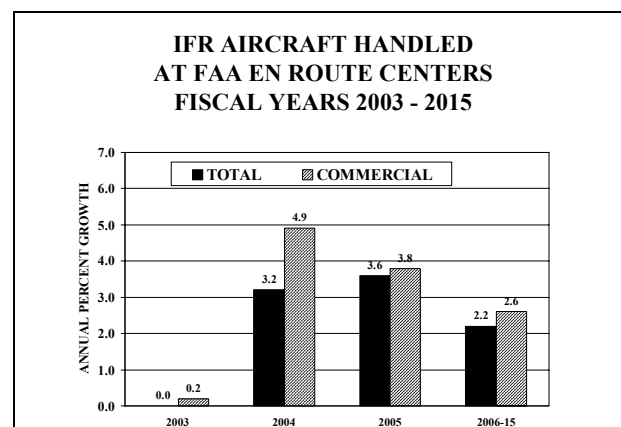
Commercial aircraft instrument operations are forecast to increase at significantly faster rates than are general aviation instrument operations, up 2.8 versus 1.4 percent over the forecast period. Military activity is expected to remain constant at its 2003 level of activity throughout the forecast period.

En Route Centers

Activity levels at FAA en route traffic control centers remained basically flat at 43.7 million in 2003, with a 0.8 percent increase in commercial activity counteracting a 2.0 percent decline in noncommercial activity. The number of aircraft handled at en route centers is forecast to increase by 3.2 percent in 2004 and 3.6 percent in 2005, largely the result of increases of 4.7 and 4.5 percent in commercial activity. En route activity increases by 2.2 percent annually over the rest of the forecast period, reaching a total of 58.4 million aircraft handled in 2015. Activity at FAA en route centers is expected to recover to pre-September 11th levels in 2005.

The number of commercial aircraft handled is projected to increase 2.9 percent annually while general aviation en route activity increases 1.6 percent a year over the 12-year forecast period. Military activity is held constant at the

2003 activity level throughout the forecast period.



The higher growth at FAA en route centers, relative to activity at FAA towered airports (2.4 versus 2.1 percent), reflects that commercial activity accounts for a much larger percentage of center activity--72.8 versus 38.6 percent at towered airports in 2003. Therefore, the projected larger increases in commercial aircraft activity have a much greater impact on total center traffic during the forecast period.

Flight Service Stations

Total flight services (non-automated) originating at traditional FAA flight service stations declined by 6.0 percent in 2003. Flight services are forecast to increase 0.4 percent in 2004, 0.3 percent in 2005, and 1.0 percent annually over the remainder of the forecast period. The number of flight plans originated is expected to decline over the first 3 years of the forecast period (down 2.5 percent), then increase at an annual rate of 0.9 percent over the rest of the forecast period to 5.7 million in 2015. The number of pilot briefs and aircraft contacted are projected to increase at annual rates of 1.2 and 1.1 percent, respectively, over the 12-year forecast period, totaling 8.1 and 3.2 million, respectively, in 2015.

TABLE I-10

FAA AVIATION FORECASTS SELECTED AVIATION DEMAND MEASURES

CALENDAR YEAR 2004-2015

SELECTED FORECASTS	HISTORICAL			FORECAST			PERCENT AVERAGE ANNUAL GROWTH				
	1995	2002	2003	2004	2005	2015	95-03	02-03	03-04	04-05	03-15
<u>U.S. Economy</u>											
GDP (Bil 1996\$)	7,543.8	9,439.9	9,730.2	10,162.8	10,527.8	14,376.0	3.2	3.1	4.4	3.6	3.3
Oil & Gas Deflator (1996 = 100)	94.2	109.1	128.2	120.5	112.1	135.0	3.9	17.5	(6.0)	(7.0)	0.4
<u>Total U.S. Commercial Enplanements (Mil)</u>											
Domestic	529.8	587.4	593.5	634.4	675.2	968.2	1.4	1.0	6.9	6.4	4.2
Large Air Carriers	474.3	493.4	483.0	506.1	533.0	743.8	0.2	(2.1)	4.8	5.3	3.7
Regionals/Commuters	55.4	94.0	110.4	128.3	142.2	224.4	9.0	17.5	16.2	10.9	6.1
International	49.7	54.1	54.7	60.1	63.9	100.1	1.2	1.0	10.0	6.3	5.2
Large Air Carriers	47.6	51.1	50.9	56.1	59.8	93.9	0.8	(0.2)	10.1	6.5	5.2
Regionals/Commuters	2.1	3.1	3.7	4.0	4.2	6.2	7.7	20.7	7.6	3.9	4.3
System	579.5	641.5	648.1	694.5	739.1	1,068.3	1.4	1.0	7.2	6.4	4.3
<u>Total U.S. Commercial RPMs (Bil)</u>											
Domestic	399.8	484.6	495.9	533.3	567.7	842.4	2.7	2.3	7.5	6.4	4.5
Large Air Carriers	387.8	452.3	453.9	481.9	508.8	736.0	2.0	0.3	6.2	5.6	4.1
Regionals/Commuters	12.0	32.3	42.1	51.5	58.9	106.4	17.0	30.2	22.4	14.4	8.0
International	144.6	165.5	157.0	175.2	188.1	305.6	1.0	(5.1)	11.6	7.4	5.7
Large Air Carriers	144.2	164.5	155.8	173.8	186.7	303.2	1.0	(5.3)	11.6	7.4	5.7
Regionals/Commuters	0.4	1.0	1.2	1.3	1.4	2.4	14.5	21.5	14.5	5.5	6.2
System	544.4	650.1	652.9	708.5	755.8	1,148.0	2.3	0.4	8.5	6.7	4.8
<u>Air Cargo RTMs (Bil)</u>											
Domestic	12.5	13.9	14.7	15.5	16.0	22.4	2.1	6.2	5.1	3.7	3.5
International	10.8	16.4	17.7	19.2	20.4	34.5	6.4	7.9	8.2	6.6	5.7
System	23.3	30.3	32.5	34.7	36.5	56.9	4.2	7.2	6.8	5.3	4.8
<u>IFR Aircraft Handled (Mil)</u>											
Commercial	27.9	32.0	32.1	33.6	34.9	44.3	1.7	0.2	4.9	3.8	2.7
Non-Commercial	12.1	12.1	11.9	12.1	12.2	13.6	(0.2)	(1.3)	1.1	1.1	1.1
Total Aircraft Handled	40.1	44.1	44.0	45.7	47.1	57.9	1.2	(0.2)	3.8	3.1	2.3

Source: CY 1995-2003, Economic data, OMB; Air Carrier/Regional data, DOT; FAA Workload, FAA.
CY 2004-2015, FAA Forecasts

The number of Direct User Access Terminal System (DUATS) services (up 6.0 percent in 2003) is projected to grow at an average annual rate of 2.1 percent over the forecast period, from 17.5 million in 2003 to 22.5 million in 2015. Combined FSS and DUATS services are expected to total 53.3 million in 2015, an annual increase of 1.4 percent.

FORECAST RISKS

Two words aptly describe FAA's current outlook for aviation demand and activity--"cautious optimism." Still, there remain numerous downside risks to achieving this year's forecasts. However, the probability of occurrence of these risks appears to be less than in the last several years and, for the first time in several years, there are actually some positive trends and/or factors that could cause aviation demand and activity to be higher than predicted.

Prominent in everyone's predictions of future aviation demand is the assumption that there will not be another terrorist incident aimed at the U.S. or world aviation community. Yet aviation, because of its high visibility and global reach, continues to be a target for international terrorism. However, tighter security measures have, to a large extent, restored the public's confidence in the integrity of U.S. and world aviation security systems.

Additionally, the SARS epidemic and, to some extent the war in Iraq, have amply demonstrated how sensitized global air travel has become to any form of extraordinary event. The reality is that in today's global marketplace, combined with the rapid assimilation of information/news, any extreme occurrence in one part of the world can cause ripples throughout the global community, including world travel markets.

Terrorist activity in general remains one of the greatest risks to achieving the forecasts

contained herein. The continuous random acts of terrorism against U.S. and United Nation troops and/or civilians both in Iraq, neighboring countries, and around the world are a constant reminder to the flying public that no place is safe from terrorism. These terrorist acts do have a negative impact on travel to targeted areas, both immediately as well as for some period of time following the incident.

In addition, just the anticipation of the war in Iraq resulted in a spike in jet fuel prices in early 2003 (up 33.3 percent in the 1st quarter), reaching a peak of \$1.05/gallon in March. Fuel prices are up 23.1 percent to date in 2003, an increase that the financially fragile U.S. airline industry can ill afford. Although, OMB and most economic forecasting services predict a fall in fuel prices over the next several years, considerably higher prices remain a distinct and real possibility.

U.S. Airways emerged from Chapter 11 bankruptcy protection in early 2003 and United Airlines is expected to emerge in mid-2004. Despite the restructuring and cost cutting that has occurred among most legacy network carriers over the past several years, these carriers' costs are still far from competitive with those of the low-cost carriers. Further rounds of cost cutting and confrontations with labor are almost a certainty. If the network carriers are unable to obtain additional concessions from labor, the alternative may be a further contraction of their route networks. This scenario could lead to more reductions in aviation services to small and medium sized communities. The demand for aviation services could be significantly impacted under such a scenario.

The commercial industry's current financial problems could conceivably lead to consolidation of the industry over the next several years. Although consolidation may improve the financial health of individual carriers and the industry, the fear is that consolidation could lessen competition in many

markets. Less competition could lead to higher fares for the flying public and lower travel demand.

One of the major drivers of the forecast in traffic demand comes from the low-cost carriers who are expected to increase their share of total traffic over the 12-year forecast period. With the exception of Southwest Airlines, however, the track record of low-cost low-fare airlines has not been that good. Although the current low-cost carriers appear to have greater financial stability and access to funding than previous start-ups, a prolonged slump in traffic and/or prolonged destructive fare wars could possibly cause one or more of these carriers to cease operations. The loss of competition could lead to increased fares and a loss of passenger demand.

Additionally, the forecast also assumes continued rapid growth among regionals/commuters, spurred in part by large air carrier restructuring and the continued transfer of routes to their smaller partners. This has, in turn, led to a rapid buildup in the carrier's regional jet fleet, including large numbers of future orders and options for additional jets. This year's forecast assumes that the large air carrier industry returns to profitability in 2005. Once demand for air travel does return, the question then becomes whether the larger carriers will "take back" routes that were transferred to their regional partners. Should this occur, some regional carriers could find themselves saddled with excess capacity and reduced demand, the combination of which could weaken their financial viability.

Although the industry received a 4-month "tax holiday" from security fees during 2003, the taxes were reinstated in October. However, the fact remains that the gap between what the passenger pays and the revenue that airlines receive has widened over the last several years. The debate over who should pay for the cost of increased security--passengers, airlines, or government--remains unresolved.

The economic forecasts used to develop this year's aviation forecasts assume very strong economic growth in 2004 and 2005. The latest Global Insight pessimistic scenario—a rapidly declining dollar, rising oil prices, higher inflation, and rising unemployment--projects a 20 percent probability that the U.S. economy will achieve real GDP growth of only 3.4 percent in 2004 and 2.2 percent in 2005. Slower economic growth would not only slow the recovery in the demand for aviation services but would also hamper and slow the industry's return to profitability.

However, Global Insight's optimistic scenario--a capital spending boom, rapid technological progress, low inflation, and a delayed downturn in housing markets--projects an equal 20 percent probability that U.S. economic growth could exceed 5.0 percent in 2004 and 4.0 percent in 2005. Higher growth would lead to increased demand for aviation services and speed the industry's return to profitability.

Internationally, the global economy's performance has been disappointing, with 5 years of weak or uneven growth since 1998. Although the current forecast calls for a return to higher trend growth rates starting in 2004, there are numerous downside risks inherent in these forecasts. Almost all world regions appear to be counting on strong export growth to the United States as a major contributor to their recoveries. If, as predicted, the U.S. dollar continues to fall, strong U.S. economic growth may not translate into strong U.S. import growth. As such, growth in the rest of the world could remain sluggish for some time into the future.

Doubts also remain over the strength of domestic demand in both Japan and the Eurozone as these countries continue to be constrained by structural economic problems, political gridlock, institutional constraints, and the authorities' reluctance to take decisive action. Additionally, it is feared that slow economic growth in Brazil and recessions in

Venezuela and Uruguay could worsen and spread to other South American economies. Also, if the economic recovery in the U.S. is weaker than forecast, this could also negatively impact countries whose economies are dependent on export trade with the United States. The current forecasts assume strong passenger growth for travel between the United States and other world regions. Any slowing of demand could seriously inhibit the growth in world passenger demand.

Historically, international markets have been subject to a series of bilateral agreements that have, for the most part, severely restricted competition. However, current negotiations between the U.S. and the European Union, prompted by a ruling of the European Court of Appeals that voided agreements negotiated by individual countries, are focusing on wider access of U.S. carriers to London Heathrow Airport and U.S. limits on foreign ownership. If successful, additional U.S. carriers could gain access to new markets and introduce new competition in the North Atlantic market. Greater competition could lead to lower fares and higher growth in these markets.

The demand for general aviation products and services, including business jets, has declined over the past 3 years. How quickly the industry recovers depends, in large part, on a strong recovery in the market for business jets. However, some financial analysts are predicting that the business jet industry is at the beginning of what could be a multiyear cyclical downturn. How quickly this flying segment responds to the predicted economic rebound will go a long way in determining whether general aviation achieves the predicted increases in the demand for its products and services.

The current forecast assumes the introduction of the low priced Eclipse jet (or similar type aircraft) in 2006, with the market for this or similar aircraft totaling 4,600 by 2015. This is a relatively conservative assumption compared to some industry estimates. If the higher industry

estimates are correct, the general aviation active jet fleet and hours flown could be considerably higher than forecast.

The current workload forecasts assume that commercial activity (air carrier and regionals/commuters) returns to pre-September levels in 2005/2006. Therefore, delays could become a critical limit to growth within this forecast period. It is critical that Government and industry planners use the next several years to develop comprehensive plans to head off certain future delays.

Although total demand at FAA facilities remains at levels considerably below those achieved prior to September 11th, these lower levels do not necessarily imply reduced workload for FAA air traffic controllers. At many U.S. large hub airports, peak period activity already exceeds that flown prior to September 11th. Based on the 2003 FAA Terminal Area Forecasts, 10 of the 35 Operational Evolution Plan (OEP) airports currently exceed pre-September 11th activity levels.¹⁵ In addition, another six airports are expected to reach or exceed pre-September 11th levels in 2004.¹⁶

The mix of aircraft now operating at most large hubs is also significantly more complex than before September 11th. Smaller regional jets, that require greater separation than the larger aircraft they replaced, account for a significantly greater proportion of total flights--18.2 percent in 2003, up from 15.7 percent in 2000. This percentage is expected to increase to 19.2 percent by 2005. These complexities will make the FAA job more challenging even with less overall traffic.

The economic scenarios presented in this document call for a strong recovery beginning in 2004 and 2005 and sustained moderate

¹⁵ Baltimore/Washington, Charlotte, Chicago Midway, Chicago O'Hare, Cincinnati, Ft. Lauderdale, Las Vegas, Memphis, Minneapolis/St. Paul, and Salt Lake City.

¹⁶ Atlanta, Denver, Detroit, Houston Intercontinental, New York LaGuardia, and San Diego.

growth for both the U.S. and world economies. If these economic forecasts are realized, the demand for commercial and general aviation products and services should fully recover to

pre-September 11th levels during the 2005/2006 time frame. Demand should also continue to expand throughout the rest of the forecast period.